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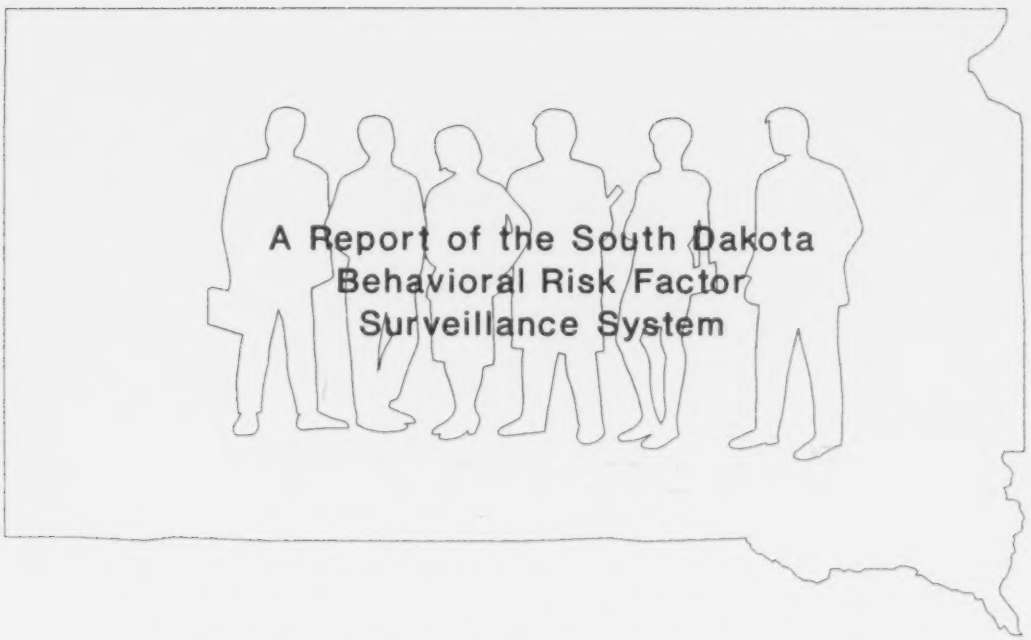
The Health Behaviors of South Dakotans 1987-1990



South Dakota Department of Health
Center for Health Policy and Statistics
November 1991

THE HEALTH BEHAVIORS OF SOUTH DAKOTANS 1987-1990

A Report of the South Dakota Behavioral Risk Factor Surveillance System

South Dakota Department of Health
Center for Health Policy and Statistics

in cooperation with
the Centers for Disease Control, Atlanta, Georgia

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at a cost of **$3.21** per copy.

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Table of Contents

Introduction

Overview..... 1
Methodology..... 3

Survey Results

Seat Belt Use..... 7
Hypertension..... 13
Overweight..... 18
Sedentary Lifestyles..... 23
Tobacco Use..... 29
Alcohol Consumption..... 35
Preventive Health Practices..... 42
Women's Health..... 47
AIDS..... 53
State Questions..... 61

Conclusion..... 65

Appendices

Appendix A - 1990 South Dakota Behavioral Risk Factor Questionnaire.....A-1
Appendix B - Sample Description.....B-1
Appendix C - Risk Factor Definitions.....C-1

List of Tables

Table 1. Disposition of All Telephone Numbers in the Sample..... 5

Table 2. At Risk for Lack of Seat Belt Use By Selected Demographic Characteristics.... 9

Table 3. Frequency of Seat Belt Use By Age..... 11

Table 4. At Risk for Hypertension By Selected Demographic Characteristics..... 15

Table 5. At Risk for Being Overweight (Based on Percent of Median) By Selected Demographic Characteristics..... 20

Table 6. At Risk for Sedentary Lifestyle By Selected Demographic Characteristics..... 25

Table 7. Physical Activity Level By Sex and Age..... 27

Table 8. At Risk for Cigarette Smoking By Selected Demographic Characteristics..... 31

Table 9. At Risk for Acute Drinking By Selected Demographic Characteristics..... 37

Table 10. At Risk for Chronic Drinking By Sex and Age..... 38

Table 11. At Risk for Drinking and Driving By Sex and Age..... 38

Table 12. Percent of Women Having Ever Had a Mammogram By Income..... 49

Table 13. How Long Since Last Mammogram By Income..... 50

Table 14. Proportion of Adult Population At Risk By Specific Behavioral Risk Factor, South Dakota, 1987-1990..... 65

Table B-1. Demographic Summary of Survey Population....B-1

Table B-2. Household Income of Survey Population.....B-1

Table B-3. Marital Status of Survey Population.....B-2

Table B-4. Level of Education of Survey Population.....B-2

Table B-5. Employment Status of Survey Population.....B-2

List of Figures

Figure 1. Frequency of Seat Belt Use..... 10

Figure 2. Frequency of Seat Belt Use By Sex..... 10

Figure 3. At Risk for Lack of Seat Belt Use, 1987-1990..... 11

Figure 4. At Risk for Lack of Seat Belt Use By Sex, 1987-1990..... 12

Figure 5. Told Blood Pressure High More Than Once..... 16

Figure 6. Taking Prescribed Medication By Sex..... 16

Figure 7. At Risk for Hypertension, 1987-1990..... 17

Figure 8. At Risk for Hypertension By Sex, 1987-1990.. 17

Figure 9. Distribution of Weight Categories..... 21

Figure 10. At Risk for Overweight, 1987-1990..... 21

Figure 11. At Risk for Overweight By Sex, 1987-1990.... 22

Figure 12. Physical Activity Level..... 26

Figure 13. Frequency of Physical Activities By Sex..... 26

Figure 14. At Risk for Sedentary Lifestyle, 1987-1990.. 28

Figure 15. At Risk for Sedentary Lifestyle By Sex, 1987-1990..... 28

Figure 16. Current Smokers By Sex and Age..... 32

Figure 17. Smoking Status By Sex..... 32

Figure 18. At Risk for Smokeless Tobacco Use..... 33

Figure 19. Smokeless Tobacco Status..... 33

Figure 20. At Risk for Cigarette Smoking, 1987-1990.... 34

Figure 21. At Risk for Cigarette Smoking By Sex, 1987-1990..... 34

Figure 22. At Risk for Acute Drinking, 1987-1990..... 39

Figure 23. At Risk for Acute Drinking By Sex, 1987-1990..... 39

Figure 24. At Risk for Chronic Drinking, 1987-1990..... 40

Figure 25. At Risk for Chronic Drinking By Sex, 1987-1990..... 40

Figure 26. At Risk for Drinking and Driving, 1987-1990..... 41

Figure 27. At Risk for Drinking and Driving By Sex, 1987-1990..... 41

Figure 28. At Risk for Cholesterol Level By Sex..... 44

Figure 29. How Long Since Blood Cholesterol Last Checked..... 44

Figure 30. How Long Since Blood Cholesterol Last Checked By Sex..... 45

Figure 31. How Long Since Last Routine Checkup..... 45

Figure 32. How Long Since Last Routine Checkup By Sex..... 46

Figure 33. How Long Since Last Mammogram..... 49

Figure 34. Reason for Last Mammogram..... 50

Figure 35. Reason for Not Having a Mammogram..... 51

Figure 36. How Long Since Last Breast Physical Examination..... 51

Figure 37. How Long Since Last Pap Test..... 52

Figure 38. Have You Heard the AIDS Virus Called HIV.... 55

Figure 39. Are There Drugs Available Which Lengthen the Life of a Person With the AIDS Virus... 55

Figure 40. Can a Person With the AIDS Virus Look and Feel Healthy and Well..... 56

Figure 41. Can a Person Get the AIDS Virus By Giving Blood..... 56

Figure 42. Can a Person Get the AIDS Virus From Mosquitoes and Other Insects..... 57

Figure 43. Would You Allow Your Child in the Same Classroom as a Child With the AIDS Virus... 57

Figure 44. What Grade Should Your Child Begin AIDS Education in School..... 58

Figure 45. Would You Eat in a Restaurant Where the Cook Has the AIDS Virus..... 58

Figure 46. Would You Work With a Person Who Has the AIDS Virus..... 59

Figure 47. Where Can You Go To Be Tested for the AIDS Virus..... 59

Figure 48. How Effective is a Condom in Preventing AIDS..... 60

Figure 49. How Far Is Your Health Care Professional Located From Your Home..... 62

Figure 50. Do You Have Health Insurance..... 62

Figure 51. Has the Cost of Health Care Ever Influenced Your Decision to Receive Care... 63

Figure 52. How Often Is Your Child (Under Age 5) Buckled in a Car Safety Seat/Seat Belt..... 63

Figure 53. How Often Is Your Child (Age 5-17) Buckled in a Seat Belt..... 64

INTRODUCTION

Overview

The South Dakota Behavioral Risk Factor Surveillance System (BRFSS) was initiated in 1987 by the South Dakota Department of Health's Center for Health Policy and Statistics with the assistance of the Centers for Disease Control (CDC). The BRFSS is designed to collect information on health risk behaviors of adult residents and monitor the prevalence of these behaviors over time. The risk factors surveyed are major contributors to disability, and premature death and illness.

Health departments traditionally have recorded mortality and morbidity statistics. However, there has never been an ongoing attempt to monitor those behaviors which contribute to premature death and illness. A systematic surveillance of behavioral risk factors was needed to establish population baselines, formulate health promotion objectives, and establish intervention priorities. To meet this need, CDC provided assistance in the development of a standardized, active surveillance system. The routine collection of behavioral risk prevalence data allows the state to assess the aggregate, long-term impact of health promotion and risk reduction interventions in the community. Specific goals of the Behavioral Risk Factor Surveillance System are to:

(1) develop, implement, and manage a monthly surveillance system designed to determine and monitor the prevalence of behavioral risk factors;

(2) promote and implement a national coordinated system which utilizes standardized methodology, uniform data items and tabular displays;

(3) generate routine information rapidly and promote a collaborative effort in interpreting and disseminating information; and,

(4) evaluate the effectiveness of the surveillance system as an indicator of major behavioral risk factors and assess its capability to provide useful data for state program planning and evaluation.

Data collected during the survey year are used by the Department of Health to plan, implement, and monitor health promotion and disease prevention efforts. Behavioral risk factor data enable public health officials in South Dakota to establish priorities and develop health promotion and education strategies specific to the needs of the population.

Data will be used by the Department to support a wide range of activities including the following.

1. Legislative Activities - Risk factor data will continue to be used extensively to support committee testimony both during regular session and during interim summer committees. Past data uses include support of a bill requiring mandatory coverage for mammography screening and several tobacco-related bills.

2. Support of Strategic Plan Initiatives - Where appropriate, BRFSS data are used to derive baseline data for priority areas for the strategic planning process. The South Dakota BRFSS will be one of the best ways to gauge progress in positively influencing behaviors for each of the initiatives. In the future, BRFSS data will be used as the strategic plan is reevaluated to identify other health problems to be prioritized for addressal by the department.

3. Department of Health Capacity Building - BRFSS data will be one of the tools used as the department seeks to build new organizational capacities and expand the services it now provides, especially toward the development of a chronic disease program. As the department prioritizes its resources, BRFSS data can be used to justify the need for such programs in the state.

4. Development and Evaluation of Public Information Efforts - Data collected through the BRFSS survey are used by the department to increase awareness and inform the general public regarding health matters through responses to media inquiries, reports, and publications. BRFSS data are presently one of the few means available to the Department of Health to measure the success of their public information campaigns.

This report presents the results of the 1990 South Dakota Behavioral Risk Factor Surveillance System and monitors trends in our population's health behaviors since monthly surveillance began in 1987.

Methodology

Participating Agencies

This survey was a combined effort of the South Dakota Department of Health and the Centers for Disease Control (CDC). The department collected the data, supervised the survey, provided the telephones, office space, interviewers, and supplies. CDC provided financial and technical assistance, developed the questionnaire, designed the methodology, and processed the data.

Method of Surveillance

A telephone survey was used for this study rather than other survey methods because of its low cost, ease of administration, ease of reaching respondents, and reliability. Telephone surveys are less representative of areas where a significant portion of the population does not have telephones. However, according to a 1991 Federal Communications Commission report, approximately 94% of households in South Dakota have telephones.

Instrument Development

The survey questionnaire (see Appendix A) was developed by the Centers for Disease Control. Standard demographic questions were included along with sections on seat belt usage, hypertension, weight, physical activity, tobacco use, alcohol consumption, preventive health practices, women's health, and AIDS. Introduction, wording of the questions, and transitional phrasing between questions resulted from extensive field testing by CDC. South Dakota also added several state-specific questions to the end of the core questionnaire.

Sample Size and Accuracy of Estimates

Estimates reported in this study for risk factor prevalence for the total adult population of South Dakota are accurate to within 1.8 to 2.8 percent at the 95 percent confidence level. It should be noted that the level of accuracy described above applies only to estimates of prevalence for the general adult South Dakota population which is represented by the total sample of 1,799. Estimates of prevalence by gender, age, income, marital status, or education categories do not reflect this level of accuracy and should be interpreted conservatively. Such estimates are presented in this report because they may suggest trends and help identify possible

high risk subpopulations. All numbers used for trend analysis are reported using a 95 percent confidence interval. It should also be noted that number totals presented on some figures and tables may not add to one hundred percent due to rounding.

It is important to remember this survey is based on self-reported data. Consequently people may tend to report a more favorable lifestyle than actually practiced. The accuracy of self-reported data also may vary according to risk factors, i.e., self-reported smoking status is thought to be more accurate than self-reported seat belt use. These limitations do not however negate the survey's ability to identify high risk groups and monitor long term trends. Extensive field testing and recent advances in collecting, processing, and analyzing self-reported information have improved the quality of such data.

Eligible Respondent Selection

Eligible respondents for the survey were individuals 18 years of age or older who resided a majority of the time at the household contacted. In households with more than one eligible respondent, a random selection was made to determine the actual respondent. Prescreening was done to eliminate business phones or non-working numbers. If for some other reason the selected respondent was not able to complete the questionnaire, another randomly selected number was used. No answers and busy signals were redialed a minimum of four times on five different days at different times before being replaced.

Data Collection Process

All 1,799 interviews were completed between January 1, 1990 and December 31, 1990 at the rate of 150 per month. Data were collected by paper and pencil. One supervisor and six interviewers were used to collect the data in 1990. Missouri Shores Women's Resource Center in Pierre, South Dakota, served as the contract agency for the Department of Health to provide survey staff. The sample selection process was conducted each month prior to the survey.

Completion Rates

The outcome of all telephone calls is shown in Table 1. The 1,799 completed interviews represent a completion rate of 51.9 percent. The refusal rate was 2.9 percent.

Table 1

Disposition of All Telephone Numbers in the Sample		
Final Outcome	Number	Percent
1. Completed Interview	1,799	51.9
2. Refused Interview	99	2.9
3. Non-Working Number	874	25.2
4. No Answer (multiple times)	251	7.2
5. Business Phone	260	7.5
6. No Eligible Respondent Available at Selected Number	4	0.1
7. Selected Respondent Unavailable	124	3.6
8. Language Barrier	1	0.0
9. Terminated During Interview	1	0.0
10. Line Busy	2	0.1
11. Respondent Unable to Respond	49	1.4
TOTAL	3,464	100.0

Data Processing

Pre-coded paper questionnaires were keypunched and transferred to a diskette by survey staff and then sent to CDC for processing. Tables showing frequencies and percentages for all questions by demographic categories were provided to the Center for Health Policy and Statistics by the Centers for Disease Control's Office of Surveillance and Analysis at the Center for Chronic Disease Prevention and Health Promotion.

Weighting

Collecting data via telephone survey often produces an overrepresentation of certain groups in the sample population. The sample population, therefore, may not be a true representation of the actual population. In order to correct this inherent problem, a weighting factor was applied to each case.

Limitations

Telephone surveys are a cost-effective method of rapidly obtaining population-based data. However, a number of limitations must be kept in mind when interpreting these data.

Certain groups are excluded from or underrepresented in telephone surveys, specifically persons who do not live in a household with a telephone, people who are difficult to contact because of the hours they are at home, and people who refuse to participate. Since these groups have behaviors which are different from the general population, estimates for the general population based on the survey sample will be biased.

The validity of survey results also depends on the accuracy of responses by participants. All self-reported data are affected by the willingness of participants to respond honestly. This is especially important when considering the validity of responses to questions which are socially sensitive or assess adherence to the law. The self-reported nature of these data must be kept in mind when interpreting results.

Validity is also affected by the ability of the respondents to accurately interpret the question and recall past behavior. To minimize these problems, the BRFSS incorporates questions which have been successfully used in previous surveys whenever possible.

Sample Description

Demographic variables including age, gender, and race were collected. The results are summarized in Appendix B and contrasted to 1988 population estimates. Subsequent data, which depict these survey respondents' demographics, have been weighted to represent the 1988 population.

Appendix B also summarizes the household income, marital status, level of education, and employment status of the survey population of the 1990 South Dakota Behavioral Risk Factor Surveillance Survey. Since data were not weighted for these factors, they are not compared to the 1988 population estimates.

SURVEY RESULTS

Seat Belt Use

Seat Belt Use

SOUTH DAKOTA	RANK OUT OF 45 STATES	RANGE FOR 45 STATES
57.4%	44	4.9%-59.6%

An estimated 57.4 percent of the adult population of South Dakota is considered to be "at risk" for lack of seat belt use (see Figure 1).

Males were at a significantly greater risk for lack of seat belt use than women (61.7 percent versus 53.3 percent). A review of risk by age showed that those 65 and older used seat belts less often than other age groups (64.4 percent considered at risk). The lowest risk prevalence by age was for 25-34 year olds at 50.3 percent. Persons who were married were more likely to use seat belts than other groups when classed by marital status. By education, respondents with a college education were at least risk at 35.8 percent. When considering income, those respondents with a reported annual income greater than $50,000 were at least risk while those in the $10 to $15,000 income range were at greatest risk. Table 2 shows the survey population at risk for lack of seat belt use by selected demographic characteristics.

The frequency of seat belt use by sex is shown in Figure 2 while Table 3 shows the frequency of seat belt usage by age.

BRFSS Definition: Respondents who report they sometimes, seldom, or never wear their seat belt.

Trends . . .

Significantly fewer South Dakota adults were at risk for lack of seat belt use in 1990 than in 1987 ($p \leq .05$). Figure 3 shows there has been a 20.3 percent decrease in the percentage of adult South Dakotans considered at risk for lack of seat belt use since data collection began in 1987.

When breaking risk down by sex, both the number of males and females considered at risk for lack of seat belt use has significantly decreased since 1987 (see Figure 4). There were significantly less

women at risk for lack of seat belt use than males in 1990 which wasn't true in 1987.

Despite this increase in seat belt usage, when compared to the other forty-five states participating in the BRFSS in 1990, South Dakota had the second highest prevalence of non-seat belt use. Among participating states, the median prevalence of non-seat belt use was 25.8 percent with a range of 4.9 percent (Hawaii) to 59.6 percent (North Dakota).

Progress Toward Year 2000 . . .

The Year 2000 Health Objectives for seat belt use are to increase the use of occupant protection systems, such as safety belts, inflatable safety restraints, and child safety seats to at least 85 percent of motor vehicle occupants and to extend seat belt use laws to all fifty states.

While direct comparison between BRFSS data and Year 2000 Health Objectives cannot be done, several observations can be made. First, despite the increased use of seat belts, adult South Dakotans fall far short of the 85 percent use rate. Secondly, although several attempts have been made to pass mandatory seat belt legislation for adults, all these attempts have failed. However in 1990, legislation was passed which required any operator of a motor vehicle to properly secure a child (age 5 and under) in an approved restraint system.

Table 2
At Risk for Lack of Seat Belt Use
By Selected Demographic Characteristics, 1990

	N	%	95% Confidence Interval
TOTAL	1,026	57.4%	± 2.8

Sex	N	%
Male	479	61.7%
Female	547	53.3%

Age	N	%
18-24	89	58.8%
25-34	201	50.3%
35-44	187	51.5%
45-54	120	63.9%
55-64	139	58.3%
65 & over	283	64.4%
Unknown/Refused	7	63.5%

Race	N	%
White	992	57.5%
Black	2	23.5%
Hispanic	5	52.6%
Other	27	58.8%

Income	N	%
< $10,000	202	68.0%
$10-$15,000	150	57.8%
$15-$20,000	136	61.6%
$20-$25,000	125	55.7%
$25-$35,000	134	54.1%
$35-$50,000	86	48.4%
> $50,000	64	46.5%
Unknown/Refused	129	61.4%

Marital Status	N	%
Married	620	55.2%
Divorced	78	58.7%
Widowed	157	65.9%
Separated	13	74.6%
Never Married	143	60.7%
Unmarried Couple	13	69.0%
Unknown/Refused	2	100.0%

Education	N	%
< 9th grade	136	72.5%
Some high school	87	67.9%
High school grad.	395	64.6%
Some tech school	17	47.3%
Tech school grad.	49	71.5%
Some college	188	51.6%
College grad.	102	35.8%
Post graduate	47	44.4%
Unknown/Refused	5	43.3%

Employment	N	%
Employed	471	54.1%
Self-employed	185	71.7%
Out-of-work >1 year	7	33.4%
Out-of-work <1 year	18	69.4%
Homemaker	57	47.7%
Student	31	52.4%
Retired	257	60.1%

N = Number of respondents in this category.
% = Weighted percentage of respondents in this category.

(Note: This is a weighted proportion of the state population at risk, based on the survey data. Weighting was calculated using 1989 population estimates from the State Data Center at the University of South Dakota at Vermillion.)

Figure 1

Frequency of Seat Belt Use

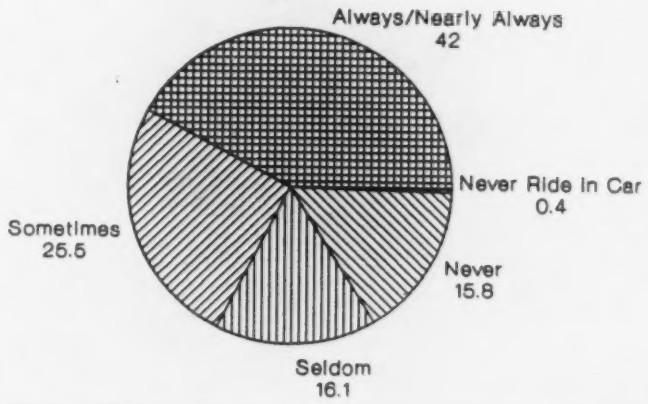


Figure 2

Frequency of Seat Belt Use By Sex

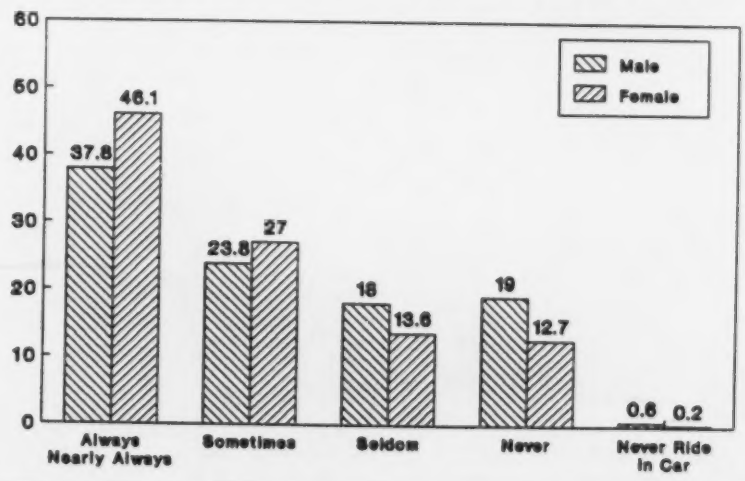


Table 3
Frequency of Seat Belt Use By Age

	Always/ Near Always	Sometimes	Seldom	Never	Never Ride in Car
18-24	40.2%	24.5%	18.1%	16.3%	0.9%
25-34	49.3%	22.9%	14.1%	13.2%	0.1%
35-44	48.5%	25.2%	14.8%	11.4%	-
45-54	36.1%	32.0%	17.6%	14.4%	-
55-64	41.1%	23.4%	18.6%	16.2%	0.2%
65 +	34.1%	26.1%	15.9%	22.5%	1.0%

Figure 3

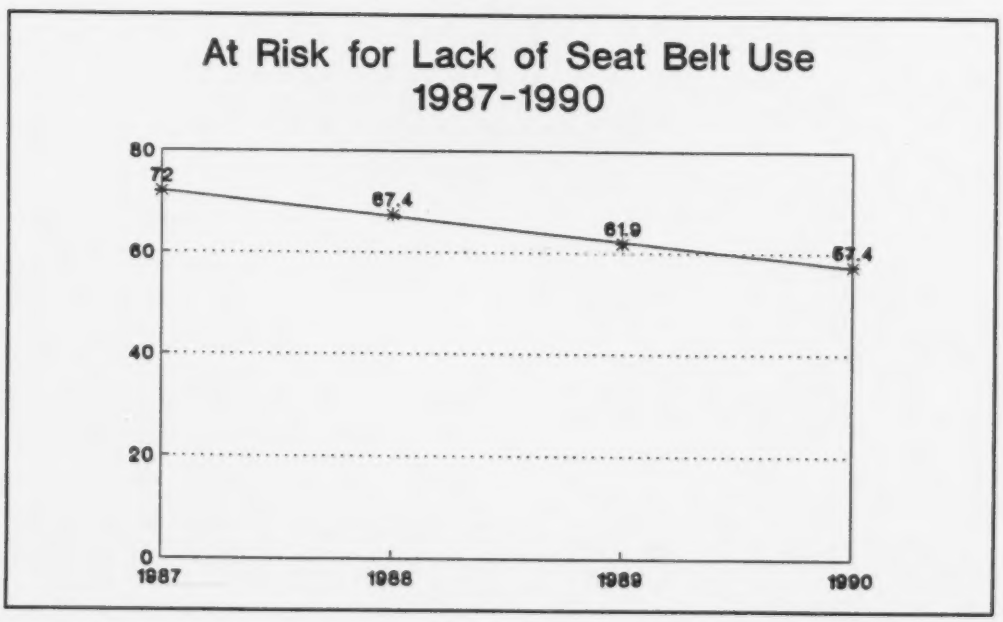
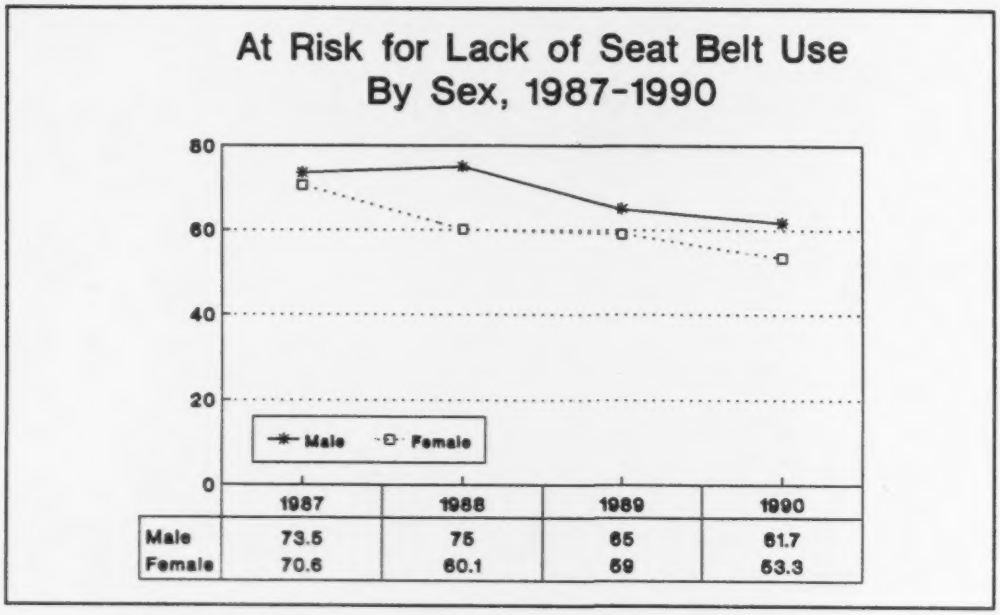


Figure 4



	1987	1988	1989	1990
Male	73.5	75	65	61.7
Female	70.6	60.1	59	53.3

Hypertension

Hypertension

SOUTH DAKOTA	RANK OUT OF 45 STATES	RANGE FOR 45 STATES
15.7%	15	12.6%-23.5%

Hypertension is a major risk factor for both heart disease and stroke. Based on the BRFSS definition of risk, 15.7 percent of the survey respondents are considered at risk for hypertension (see Table 4).

Women were at greater risk for hypertension than men, 17.2 percent vs. 14.1 percent. As might be expected, those individuals in the 65 and older age group were at greater risk than other age groups at 36.4 percent.

Over 19 percent of the respondents have been told their blood pressure is high and of those, 72.9 percent have been told this more than once (see Figure 5). Medication to control high blood pressure was prescribed to 66.1 percent of the hypertensive respondents. Figure 6 gives a breakdown by sex of respondents taking prescribed medication.

BRFSS Definition: Respondents who report they have been told their blood pressure is high more than once or are on medication.

Trends . . .

Since 1987 the percentage of adult South Dakota residents at risk for hypertension has decreased slightly (9.8 percent) but this is not considered a significant decrease (see Figure 7)($p \leq .05$). A breakdown of risk by sex shows no significant trend emerging for either males or females in the past four years (see Figure 8).

South Dakota ranks 15th lowest among the 45 states participating in the BRFSS for percentage of adult population at risk for hypertension. Mississippi had the highest percentage at 23.5% while Colorado had the lowest percentage at 12.6%. The median percentage was 16.3%

Progress Toward Year 2000 . . .

The Year 2000 Health Objectives for hypertension are to increase to at least 90 percent the proportion of people with high blood pressure who are taking action to help control their blood pressure and to increase to at least 50 percent the proportion of people with high blood pressure whose blood pressure is under control. These objectives do not correlate to data as they are currently collected by BRFSS.

Table 4
At Risk for Hypertension
By Selected Demographic Characteristics, 1990

	N	%	95% Confidence Interval
TOTAL	325	15.7%	± 1.8

Sex	N	%
Male	127	14.1%
Female	198	17.2%

Age	N	%
18-24	2	1.0%
25-34	24	5.2%
35-44	31	8.9
45-54	33	15.6%
55-64	69	29.5%
65 & over	163	36.4%
Unknown/Refused	3	17.3%

Race	N	%
White	316	16.0%
Black	1	6.4%
Hispanic	2	15.7%
Other	6	8.0%

Income	N	%
< $10,000	67	18.8%
$10-$15,000	58	20.7%
$15-$20,000	33	11.7%
$20-$25,000	39	17.6%
$25-$35,000	30	11.5%
$35-$50,000	27	13.5%
> $50,000	18	11.0%
Unknown/Refused	53	19.7%

Marital Status	N	%
Married	184	15.6%
Divorced	22	17.5%
Widowed	94	41.3%
Separated	4	18.1%
Never Married	19	4.4%
Unmarried Couple	2	9.4%
Unknown/Refused	-	-

Education	N	%
< 9th grade	63	32.6%
Some high school	29	18.3%
High school grad.	117	16.7%
Some tech school	7	19.8%
Tech school grad.	13	14.7%
Some college	48	10.5%
College grad.	33	11.1%
Post graduate	15	10.3%
Unknown/Refused	-	-

Employment	N	%
Employed	98	9.7%
Self-employed	37	13.6%
Out-of-work >1 year	4	27.5%
Out-of-work <1 year	2	6.3%
Homemaker	25	20.4%
Student	2	2.3%
Retired	157	36.8%

N = Number of respondents in this category.
% = Weighted percentage of respondents in this category.

(Note: This is a weighted proportion of the state population at risk, based on the survey data. Weighting was calculated using 1989 population estimates from the State Data Center at the University of South Dakota at Vermillion.)

Figure 5

Told Blood Pressure High More Than Once

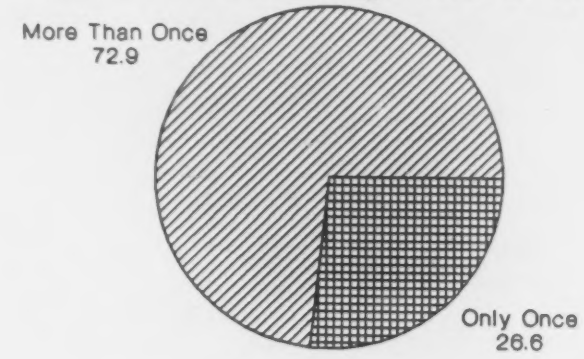


Figure 6

Taking Prescribed Medication By Sex

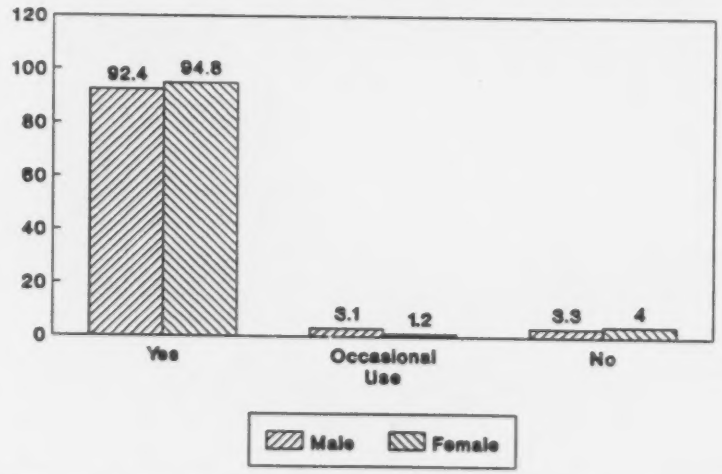
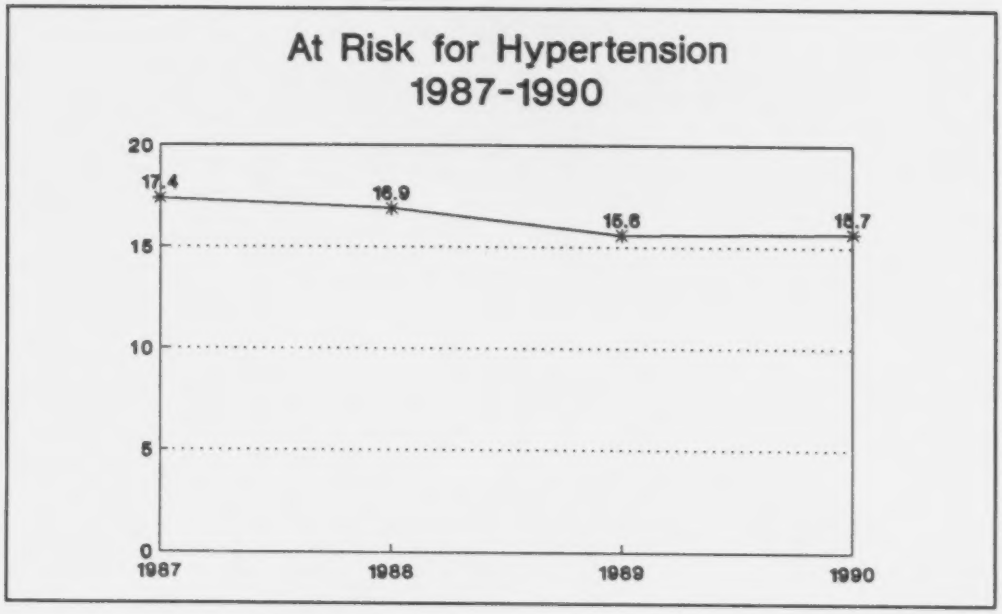


Figure 7



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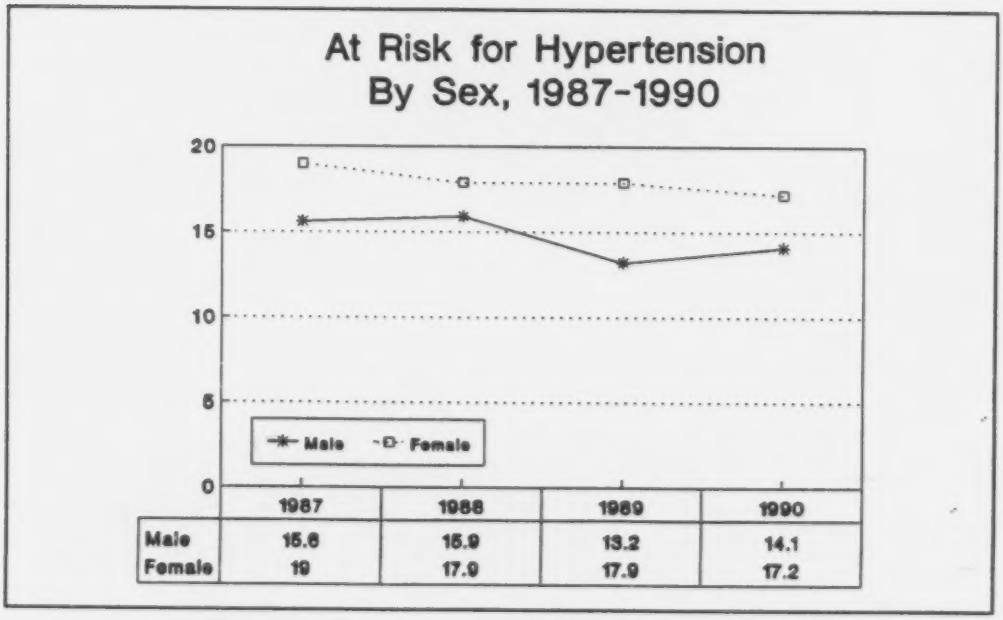


	1987	1988	1989	1990
Male	15.6	15.9	13.2	14.1
Female	19	17.9	17.9	17.2

Overweight

Overweight

SOUTH DAKOTA	RANK OUT OF 45 STATES	RANGE FOR 45 STATES
27.5%	25	19.3%-31.5%

An estimated 27.5 percent of South Dakota's adult population are "at risk for being overweight with a higher percentage of males than females considered at risk (29.2 percent vs. 25.9 percent) (see Table 5). Figure 9 shows the weight distribution of the survey population.

In general, as age increased in the survey group, so did weight. The exception being in the 55-64 year old age group and those age 65 and older. In terms of marital status, those respondents who were widowed were at greater risk for being overweight (30.4 percent) while those respondents who have never been married were at least risk (16.0 percent). When looking at income levels, those respondents with a reported income of $10-$15,000 were at greatest risk for being overweight (33.9 percent) while those with a reported annual income of less than $10,000 were at least risk (25.8 percent).

BRFSS Definition: Respondents at or above 120% of ideal weight. Ideal weight is defined as the mid-value of a median frame person from the 1959 Metropolitan Height-Weight Tables.

Trends . . .

While the percentage of adult South Dakotans considered at risk for being overweight has fluctuated, the risk has remained relatively constant ($p \leq .05$) (see Figure 10). Risk for overweight by sex has also remained relatively constant (see Figure 11).

In 1990, South Dakota had the 25th lowest prevalence of overweight (based on percent of median) at 27.5 percent. The national median was 26.9 percent with the District of Columbia having the highest prevalence of overweight at 31.5 percent and Colorado having the lowest (19.2 percent).

Progress Toward Year 2000 . . .

The Year 2000 Health Objective for overweight is to reduce overweight to a prevalence of no more than 20 percent among people aged 20 and older and no more than 15 percent among adolescents aged 12 to 19. Overweight as defined for Year 2000 Health Objective purposes is defined as body mass index (BMI) equal to or greater than 27.8 for men and 27.3 percent for women. BMI is calculated by dividing weight in kilograms by the square of height in meters.

Based on this definition, South Dakota does not meet the Year 2000 Health Objective with 22.6 percent of the adult population considered overweight.

Table 5
At Risk for Being Overweight (Based on Percent of Median)
By Selected Demographic Characteristics, 1990

	N	%	95% Confidence Interval
TOTAL	515	27.5%	± 2.2

Sex	N	%
Male	243	29.2%
Female	272	25.9%

Age	N	%
18-24	17	9.0%
25-34	99	24.4%
35-44	92	26.2%
45-54	87	43.1%
55-64	83	35.3%
65 & over	134	30.9%
Unknown/Refused	3	23.1%

Race	N	%
White	492	27.2%
Black	3	46.7%
Hispanic	1	10.5%
Other	19	40.3%

Income	N	%
< $10,000	87	25.8%
$10-$15,000	86	33.9%
$15-$20,000	64	26.6%
$20-$25,000	57	26.2%
$25-$35,000	78	28.3%
$35-$50,000	50	27.1%
> $50,000	38	29.0%
Unknown/Refused	55	23.1%

Marital Status	N	%
Married	344	29.8%
Divorced	34	30.1%
Widowed	71	30.4%
Separated	4	19.8%
Never Married	57	16.0%
Unmarried Couple	5	22.2%
Unknown/Refused	-	-

Education	N	%
< 9th grade	73	37.7%
Some high school	40	30.7%
High school grad.	201	31.5%
Some tech school	13	36.3%
Tech school grad.	17	20.3%
Some college	86	21.2%
College grad.	59	22.2%
Post graduate	26	22.3%
Unknown/Refused	-	-

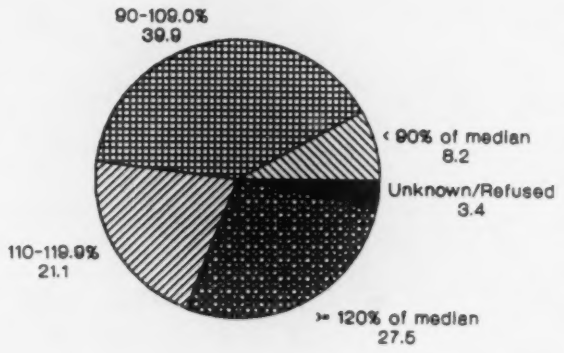
Employment	N	%
Employed	243	26.6%
Self-employed	91	34.0%
Out-of-work >1 year	3	13.2%
Out-of-work <1 year	11	29.8%
Homemaker	37	29.1%
Student	8	11.5%
Retired	122	29.1%

N = Number of respondents in this category.
% = Weighted percentage of respondents in this category.

(Note: This is a weighted proportion of the state population at risk, based on the survey data. Weighting was calculated using 1989 population estimates from the State Data Center at the University of South Dakota at Vermillion.)

Figure 9

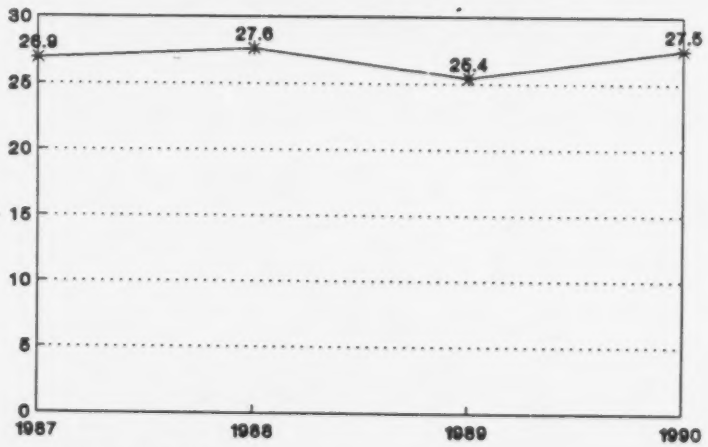
Distribution of Weight Categories



Note: Based on percent of median

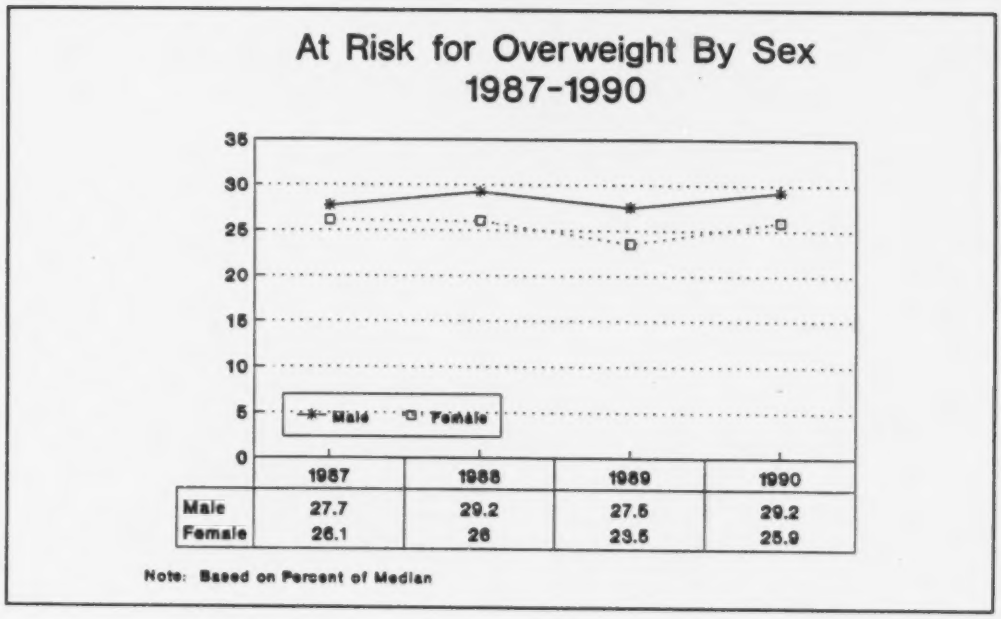
Figure 10

At Risk for Overweight, 1987-1990



Note: Based on Percent of Median

Figure 11



	1987	1988	1989	1990
Male	27.7	29.2	27.5	29.2
Female	26.1	26	23.5	25.9

Note: Based on Percent of Median

Sedentary Lifestyles

Sedentary Lifestyles

SOUTH DAKOTA	RANK OUT OF 45 STATES	RANGE FOR 45 STATES
56.6%	22	44.4%-73.1%

Exercise is an important component of a healthy lifestyle. According to the 1990 South Dakota BRFSS, 56.6 percent of the adult population surveyed reported being at risk for a sedentary lifestyle (see Table 6 and Figure 12).

Males were at a significantly greater risk for sedentary lifestyle than females (62.1 percent vs. 51.4 percent). Those respondents in the 18-24 year age group were at the least risk for sedentary lifestyle (47.6 percent) while those in the 65 and over age group were at the highest risk (62.0 percent). Table 7 shows physical activity level by sex and age.

Walking was the most popular reported activity (51.4 percent) followed by yard work (7.3 percent), running (6.4 percent), aerobic class (4.5 percent), and bicycling (3.8 percent). See Figure 13 for most frequently reported physical activities by sex.

BRFSS Definition: Respondents at sedentary or irregular activity level.

Trends . . .

While there were significantly fewer females than males at risk for sedentary lifestyle in 1988 and 1989 the overall prevalence has remained relatively unchanged over the past four years ($p \leq .05$) (see Figures 14 and 15).

Among the 45 states participating in the BRFSS, South Dakota had the 22nd lowest percentage at risk for sedentary lifestyle at 56.6 percent. Colorado residents were at least risk at 44.4 percent while District of Columbia residents were at highest risk at 73.1 percent. The national median was 58.1 percent.

Progress Toward Year 2000 . . .

The Year 2000 Health Objective for exercise is to reduce to no more than 15 percent the proportion of people aged six and older who engage in no leisure-time physical activity. Although the age groups are not directly comparable, it does not appear that South Dakotans are meeting this objective.

Table 6
At Risk for Sedentary Lifestyle
By Selected Demographic Characteristics, 1990

	N	%	95% Confidence Interval
TOTAL	1,017	56.6%	± 2.6

Sex	N	%
Male	490	62.1%
Female	527	51.4%

Age	N	%
18-24	72	47.6%
25-34	238	60.8%
35-44	178	50.2%
45-54	112	58.4%
55-64	145	61.2%
65 & over	272	62.0%
Unknown/Refused	-	-

Race	N	%
White	984	56.9%
Black	4	51.7%
Hispanic	4	42.3%
Other	25	50.8%

Income	N	%
< $10,000	184	61.1%
$10-$15,000	146	61.6%
$15-$20,000	146	65.6%
$20-$25,000	133	58.2%
$25-$35,000	126	49.2%
$35-$50,000	82	45.2%
> $50,000	67	48.0%
Unknown/Refused	133	60.7%

Marital Status	N	%
Married	654	57.7%
Divorced	66	48.3%
Widowed	148	64.4%
Separated	10	60.4%
Never Married	126	50.8%
Unmarried Couple	12	56.3%
Unknown/Refused	1	77.7%

Education	N	%
< 9th grade	142	75.4%
Some high school	82	64.0%
High school grad.	380	61.4%
Some tech school	25	66.6%
Tech school grad.	41	60.2%
Some college	179	50.5%
College grad.	117	41.5%
Post graduate	45	42.0%
Unknown/Refused	6	62.2%

Employment	N	%
Employed	492	56.3%
Self-employed	179	69.0%
Out-of-work >1 year	8	48.2%
Out-of-work <1 year	12	47.8%
Homemaker	63	52.0%
Student	22	38.1%
Retired	241	56.1%

N = Number of respondents in this category.
% = Weighted percentage of respondents in this category.

(Note: This is a weighted proportion of the state population at risk, based on the survey data. Weighting was calculated using 1989 population estimates from the State Data Center at the University of South Dakota at Vermillion.)

Figure 12

Physical Activity Level

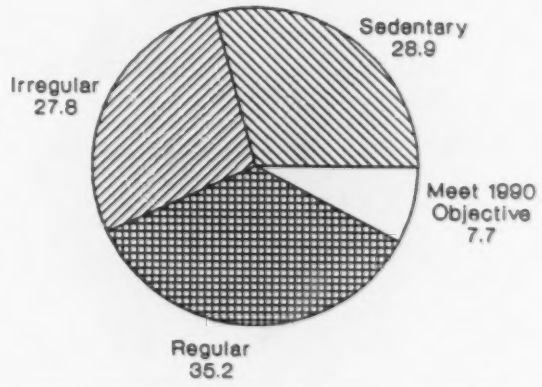


Figure 13

Frequency of Primary Activities By Sex

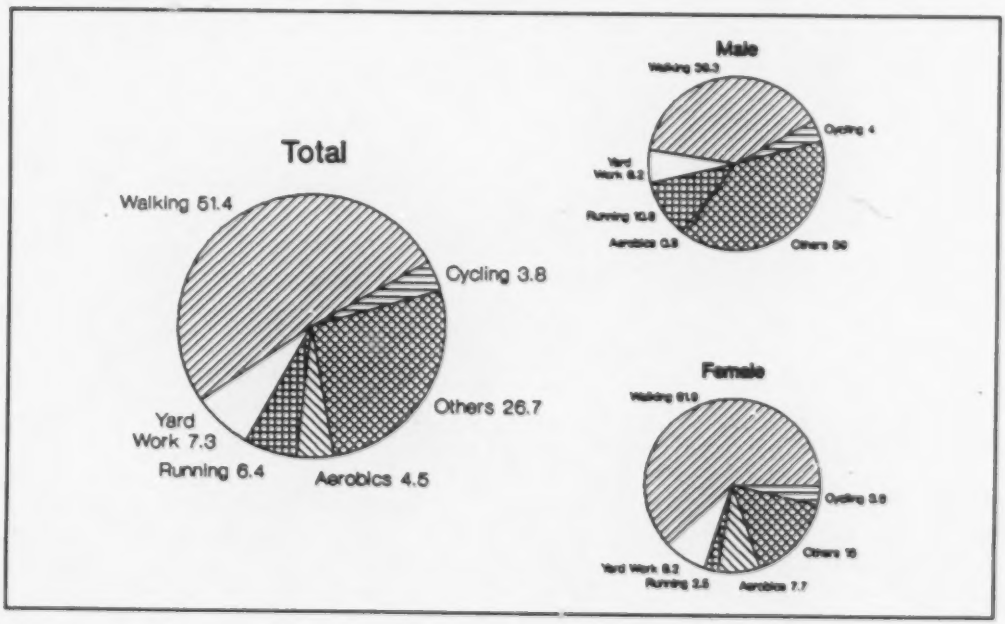


Table 7
Physical Activity Level By Sex and Age

	Sedentary		Irregular		Regular		1990 Objective	
	N	%	N	%	N	%	N	%
Sex								
Male	256	32.1	234	30.0	243	30.2	60	7.5
Female	266	25.8	261	25.7	388	39.8	81	7.9
Age								
18-24	30	19.6	42	28.0	70	44.5	12	7.9
25-34	87	22.6	151	38.2	151	35.0	18	4.3
35-44	88	24.8	90	25.4	162	42.8	25	7.0
45-54	58	30.9	54	27.6	76	38.7	7	2.9
55-64	88	38.0	57	23.2	57	24.9	32	13.9
65+	171	40.2	101	21.8	115	26.2	47	11.8

Sedentary - Persons who reported either no physical activity or physical activity less than three times per week for less than 20 minutes each time, excluding job-related activity.

Irregular - Persons who perfomed a physical activity less than 20 minutes each time or less than three times a week.

Regular - Persons who exercised at least three times per week for 20 minutes or more each time.

1990 Objective - Persons who exercise regularly and vigorously in an activity using the heart and lungs at 60% capacity or greater, according to a standard scaled by age. This objective is used to measure the nation's progress toward meeting national health objectives in the year 1990.

Figure 14

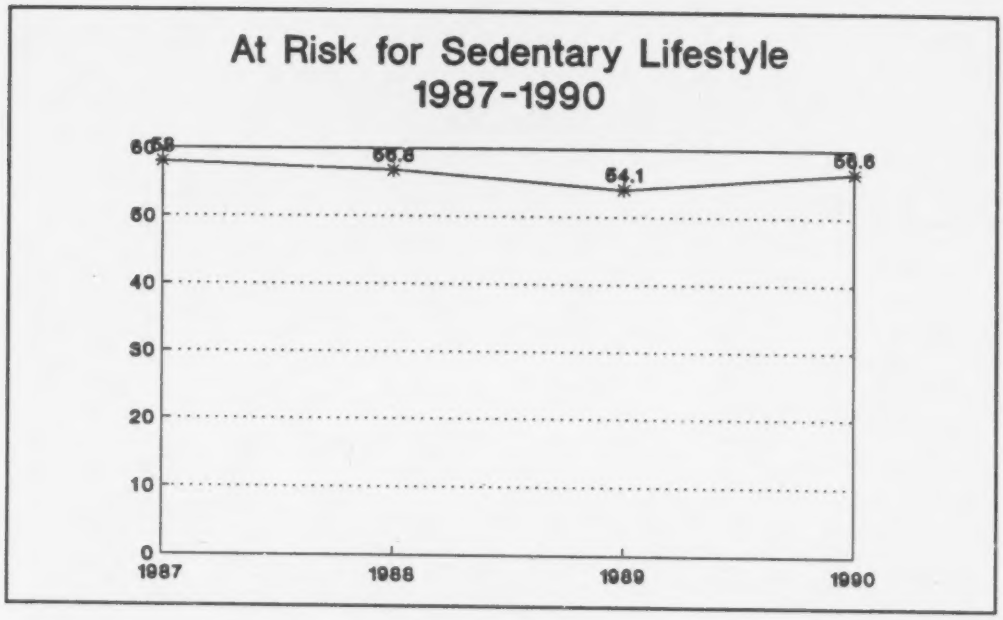
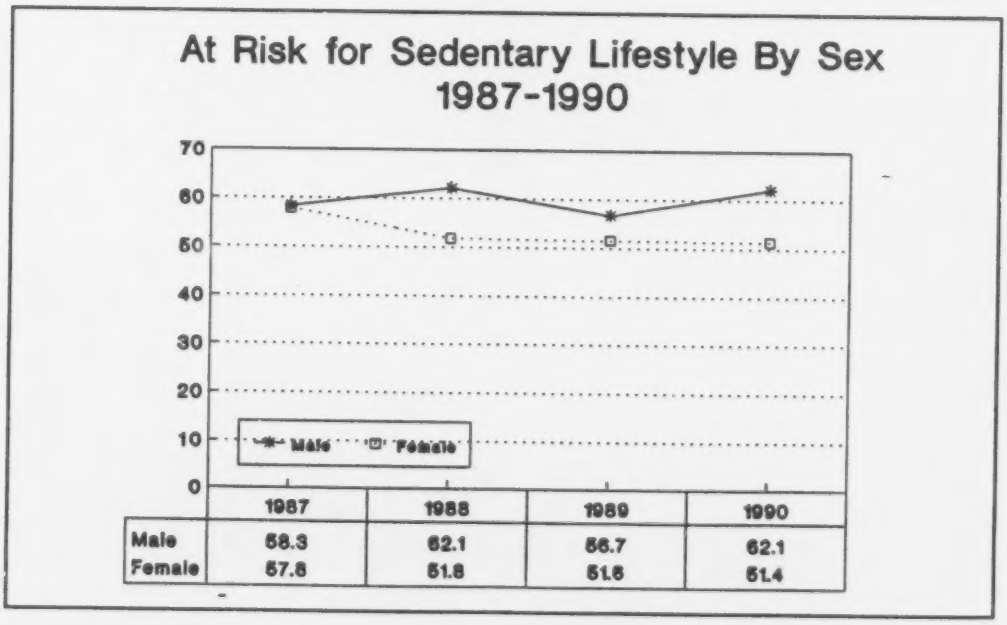


Figure 15



Tobacco Use

Tobacco Use

SOUTH DAKOTA	RANK OUT OF 45 STATES	RANGE FOR 45 STATES
20.7%	8	16.7%-29.0%

Cigarette Smoking - In South Dakota 20.7 percent of the adult population reports being at risk for cigarette smoking. Table 8 shows the survey population of smokers according to selected demographic characteristics.

Reviewing the characteristics of reported smokers in the survey, 23.5 percent were male and 18.1 percent were female. By specific age groups, the reported prevalence of smoking was highest among 35-44 year olds followed by 25-34 year olds (26.2 percent and 25.4 percent respectively). Among income groups, the highest proportion (30.0 percent) at risk for smoking reported an annual income of $10-$15,000. Figure 16 shows current smokers by sex and age while smoking status by sex is shown in Figure 17.

Attempts to quit smoking were reported by 58.0 percent of smokers. Of those, 19.0 percent reported staying off cigarettes for a year or more while 22.1 percent went less than a week. Attempts to quit smoking were higher among those 35 to 44 years of age and slightly higher for females.

BRFSS Definition for Cigarette Smoking: Current regular smoker (ever smoked 100 cigarettes and smoke now).

Smokeless Tobacco - Currently 4.9 percent of the adult population of South Dakota is considered at risk for smokeless tobacco use (see Figure 18). Smokeless tobacco use status is shown in Figure 19.

BRFSS Definition for Smokeless Tobacco: Respondents who currently use chewing tobacco, snuff, or both.

Trends . . .

Since 1987 the percentage of the adult population of South Dakota considered at

risk for cigarette smoking has declined 17.9 percent ($p \leq .05$). While this figure is not statistically significant, there is an overall declining trend being established (see Figures 20 and 21).

In 1990, South Dakota had the 8th lowest prevalence of smoking among the 45 states participating in the BRFSS. Utah had the lowest prevalence at 16.7 percent while Kentucky had the highest prevalence at 29.0 percent. The national median was 22.6 percent.

Ranking for smokeless tobacco use was not done since those questions were optional and not a part of the core BRFSS questionnaire. No trend analysis was done for smokeless tobacco use risk due to the lack of sufficient data.

Progress Toward Year 2000 . . .

The Year 2000 Health Objective which deals with cigarette smoking is to reduce cigarette smoking to a prevalence of no more than 15 percent among people aged 20 and older. Although age categories for the Year 2000 Health Objectives do not directly compare, it is clear that South Dakota falls short of the desired 15 percent prevalence.

The Year 2000 Health Objective for smokeless tobacco use calls for a reduction in smokeless tobacco use by males aged 12 through 24 to a prevalence of no more than 4 percent. The Year 2000 Objectives define a smokeless tobacco user as someone who has used either snuff or chewing tobacco at least 20 times and who currently uses snuff or chewing tobacco. In 1990, 6.0 percent of South Dakota males aged 18-24 reported currently using <u>both</u> snuff and chewing tobacco.

Table 8
At Risk for Cigarette Smoking
By Selected Demographic Characteristics, 1990

	N	%	95% Confidence Interval
TOTAL	369	20.7%	± 2.1

Sex	N	%
Male	186	23.5%
Female	183	18.1%

Age	N	%
18-24	27	18.2%
25-34	103	25.4%
35-44	97	26.2%
45-54	43	21.1%
55-64	45	19.1%
65 & over	52	13.3%
Unknown/Refused	2	23.1%

Race	N	%
White	349	20.5%
Black	1	17.1%
Hispanic	3	29.7%
Other	16	29.7%

Income	N	%
< $10,000	55	19.0%
$10-$15,000	75	30.0%
$15-$20,000	51	23.3%
$20-$25,000	56	25.4%
$25-$35,000	58	20.6%
$35-$50,000	29	16.0%
> $50,000	19	13.1%
Unknown/Refused	26	14.3%

Marital Status	N	%
Married	227	20.3%
Divorced	57	39.4%
Widowed	30	15.2%
Separated	4	27.6%
Never Married	41	17.4%
Unmarried Couple	10	37.2%
Unknown/Refused	-	-

Education	N	%
< 9th grade	21	12.0%
Some high school	39	36.7%
High school grad.	145	22.8%
Some tech school	10	27.3%
Tech school grad.	19	28.4%
Some college	79	20.6%
College grad.	38	12.7%
Post graduate	17	17.2%
Unknown/Refused	1	18.9%

Employment	N	%
Employed	220	24.0%
Self-employed	44	16.8%
Out-of-work >1 year	7	44.0%
Out-of-work <1 year	7	28.2%
Homemaker	19	15.3%
Student	13	19.0%
Retired	59	15.5%

N = Number of respondents in this category.
% = Weighted percentage of respondents in this category.

(Note: This is a weighted proportion of the state population at risk based on the survey data. Weighting was calculated using 1989 population estimates from the State Data Center at the University of South Dakota at Vermillion.)

Figure 16

Current Smokers by Sex and Age

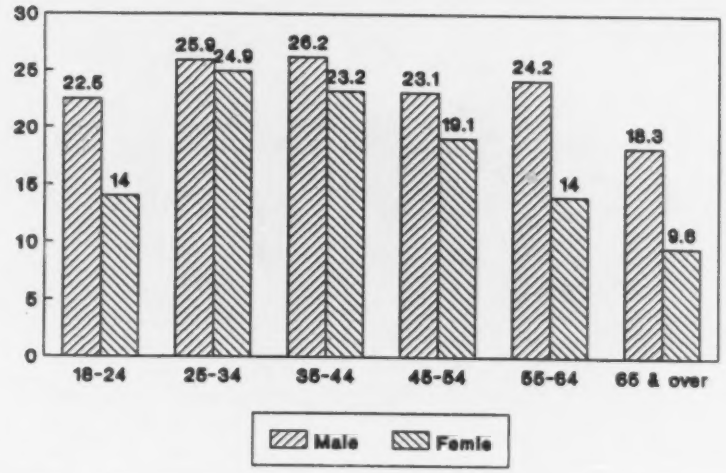


Figure 17

Smoking Status By Sex

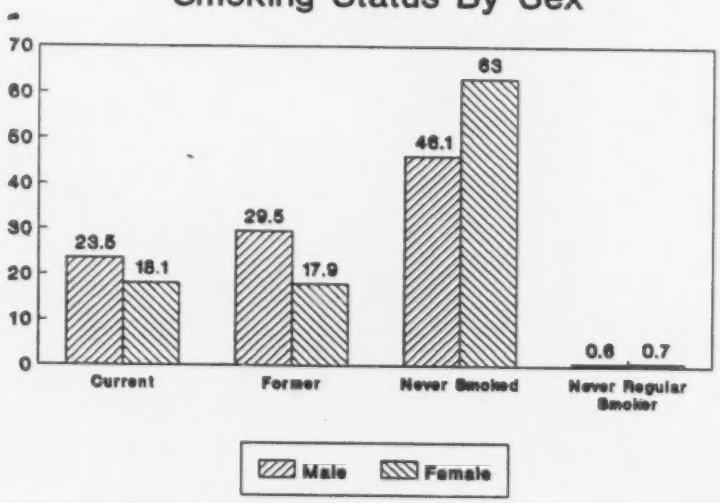


Figure 18

At Risk for Smokeless Tobacco Use

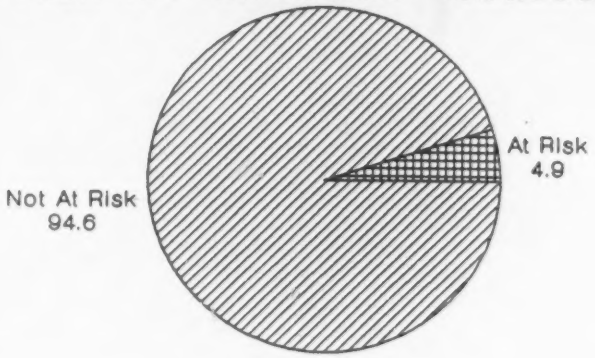


Figure 19

Smokeless Tobacco Status

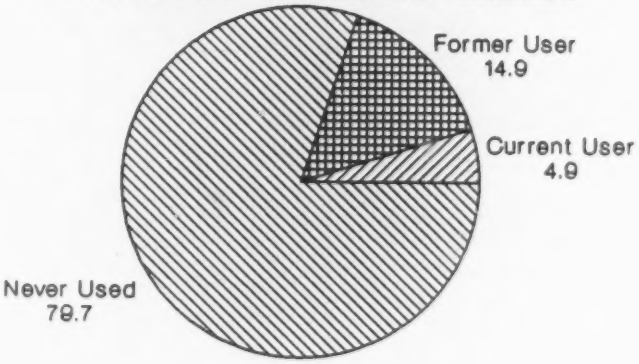


Figure 21

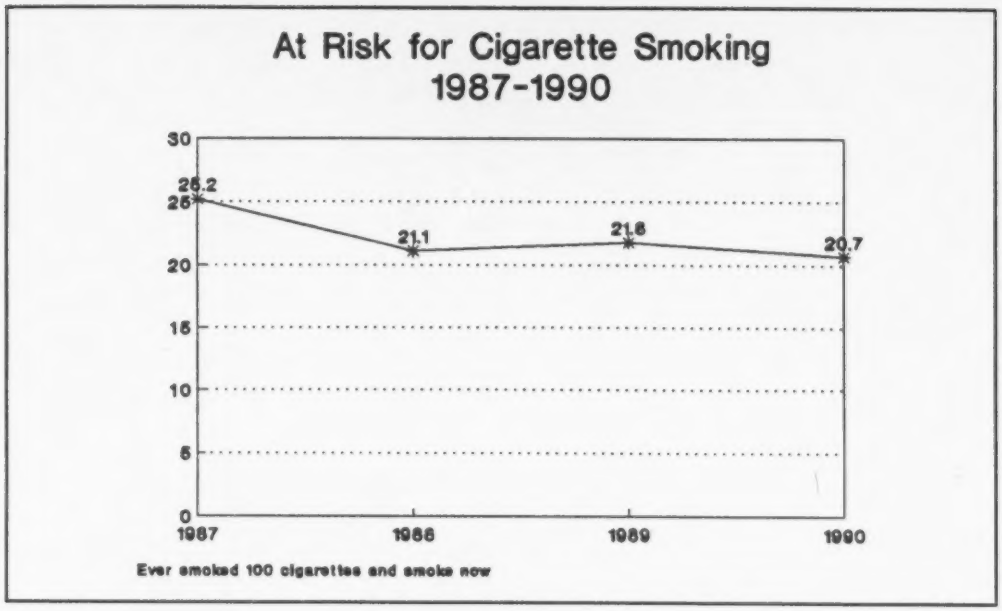
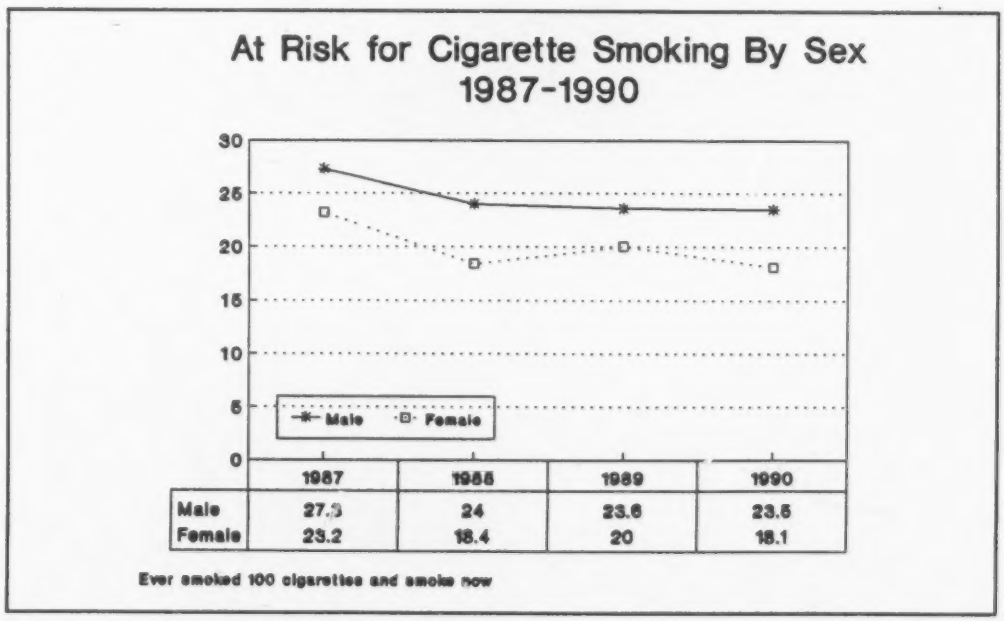


Figure 22



Alcohol Consumption

Alcohol Consumption

SOUTH DAKOTA	RANK OUT OF 45 STATES	RANGE FOR 45 STATES
15.8%	27	5.4%-26.8%

Acute Drinking - An estimated 15.8 percent of the adult population is considered at risk for acute drinking. Table 9 summarizes risk by selected demographic characteristics. Males were at a much greater risk than females (23.8 percent versus 8.2 percent). Those in the 18 to 24 year age group reported a much higher risk of acute drinking at 32.9 percent.

BRFSS Definition for Acute Drinking: Respondents who report having 5 or more drinks on an occasion, one or more times in the past month.

SOUTH DAKOTA	RANK OUT OF 45 STATES	RANGE FOR 45 STATES
2.1%	9	1.4%-6.0%

Chronic Drinking - In South Dakota an estimated 2.1 percent of the adult population reports being at risk for chronic drinking (see Table 10). As with acute drinking, males were at greater risk than females (3.4 percent to 0.9 percent) while those 18-24 reported greater risk for chronic drinking at 5 percent.

BRFSS Definition for Chronic Drinking: Respondents who report an average of 60 or more drinks in a month.

SOUTH DAKOTA	RANK OUT OF 45 STATES	RANGE FOR 45 STATES
3.5%	36	0.9%-5.9%

Drinking and Driving - According to the 1990 BRFSS survey, 3.5 percent of the adult population reports being at risk for drinking and driving (see Table 11). Men were at greater risk at 5.8

percent than women at 1.3 percent. Those age 18 to 24 reported a greater risk for drinking and driving than any other age group at 8.6 percent.

BRFSS Definition for Drinking and Driving:
Respondents who report having driven after having too much to drink, one or more times in the past month.

Trends . . .

Figure 22 shows that there were fewer adult South Dakotans at risk for acute drinking in 1990 than in 1987, however the 22.5 percent - reduction in risk does not represent a significant decrease ($p \leq .05$). Men are at a significantly greater risk for acute drinking than females (see Figure 23). Risk for acute drinking among females has remained fairly constant over the past four years.

Risk for chronic drinking and drinking and driving is also decreasing although not significantly (see Figures 24 and 26). As with acute drinking, men are at significantly greater risk for both chronic drinking and drinking and driving than women (see Figures 25 and 27).

South Dakota has the 27th lowest prevalence of acute drinking, 9th lowest prevalence of chronic drinking, and 10th highest prevalence of drinking and driving. The national median for acute drinking was 15.2 percent, 3.2 percent for chronic drinking, and 2.8 percent for drinking and driving.

Progress Toward Year 2000 . . .

The Year 2000 Health Objectives for alcohol consumption relate to health status, risk reduction, public awareness, professional education and awareness, and service and protection to reduce alcohol and other drug problems. They do not include objectives related to alcohol consumption as defined by the BRFSS.

Table 9
At Risk for Acute Drinking
By Selected Demographic Characteristics, 1990

	N	%	95% Confidence Interval
TOTAL	246	15.8%	± 2.0

Sex	N	%
Male	177	23.8%
Female	69	8.2%

Age	N	%
18-24	54	32.9%
25-34	97	24.3%
35-44	50	14.3%
45-54	26	14.5%
55-64	13	6.2%
65 & over	6	1.9%
Unknown/Refused	-	-

Race	N	%
White	237	15.8%
Black	1	14.1%
Hispanic	-	-
Other	8	18.4%

Income	N	%
< $10,000	30	15.9%
$10-$15,000	34	15.4%
$15-$20,000	29	12.0%
$20-$25,000	40	19.5%
$25-$35,000	49	21.5%
$35-$50,000	32	17.8%
> $50,000	17	14.0%
Unknown/Refused	15	7.8%

Marital Status	N	%
Married	132	12.3%
Divorced	32	29.1%
Widowed	4	2.5%
Separated	1	4.1%
Never Married	70	31.6%
Unmarried Couple	6	32.0%
Unknown/Refused	1	77.7%

Education	N	%
< 9th grade	5	2.8%
Some high school	7	8.6%
High school grad.	96	17.8%
Some tech school	5	11.8%
Tech school grad.	11	15.4%
Some college	73	22.4%
College grad.	37	15.2%
Post graduate	12	11.9%
Unknown/Refused	-	-

Employment	N	%
Employed	161	19.1%
Self-employed	44	18.4%
Out-of-work >1 year	1	7.7%
Out-of-work <1 year	5	19.1%
Homemaker	6	4.7%
Student	23	39.7%
Retired	6	1.7%

N = Number of respondents in this category.
% = Weighted percentage of respondents in this category.

(Note: This is a weighted proportion of the state population at risk, based on the survey data. Weighting was calculated using 1989 population estimates from the State Data Center at the University of South Dakota at Vermillion.)

Table 10
At Risk for Chronic Drinking By Sex and Age

	At Risk		Not At Risk	
	N	%	N	%
Sex				
Male	28	3.4%	746	93.9%
Female	5	0.9%	986	97.8%
Age				
18-24	6	5.0%	144	92.3%
25-34	11	2.7%	390	96.0%
35-44	7	2.0%	349	95.1%
45-54	5	2.0%	187	96.7%
55-64	3	1.1%	225	95.6%
65+	1	0.2%	428	98.9%
Unknown	-	-	9	88.5%
Total	33	2.1%	1,732	95.9%

Table 11
At Risk for Drinking and Driving By Sex and Age

	At Risk		Not At Risk	
	N	%	N	%
Sex				
Male	43	5.8%	748	91.4%
Female	11	1.3%	993	94.8%
Age				
18-24	12	8.6%	142	91.4%
25-34	23	5.0%	383	94.8%
35-44	11	3.5%	352	95.7%
45-54	7	3.6%	188	96.4%
55-64	1	0.2%	232	99.1%
65+	-	-	434	100.0%
Unknown	-	-	10	100.0%
Total	54	3.5%	1,741	96.3%

Figure 22

At Risk for Acute Drinking, 1987-1990

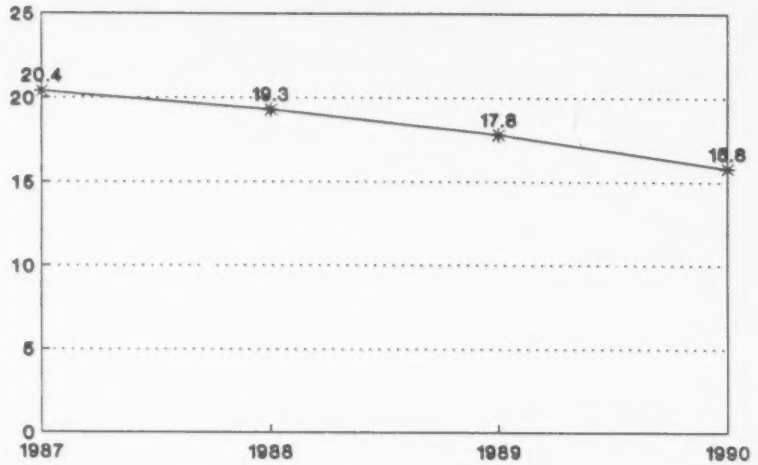
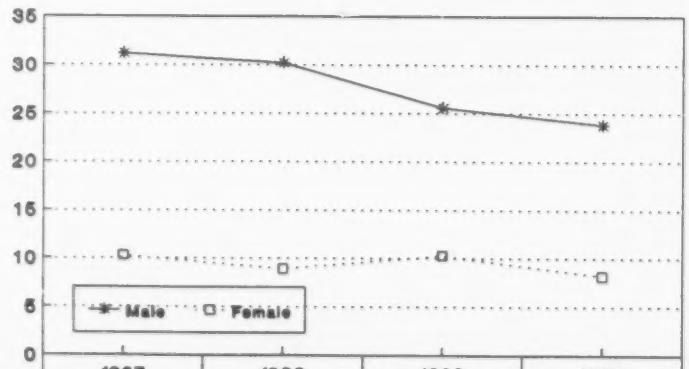


Figure 23

At Risk for Acute Drinking By Sex 1987-1990



	1987	1988	1989	1990
Male	31.2	30.2	25.6	23.8
Female	10.3	8.9	10.3	8.2

Figure 24

At Risk for Chronic Drinking, 1987-1990

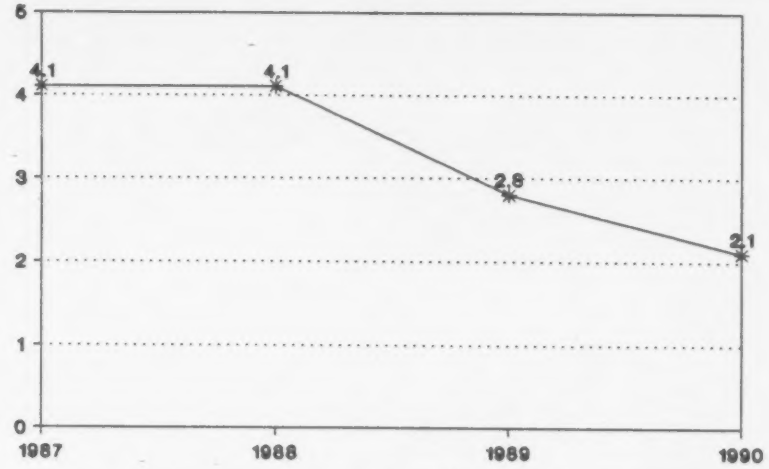
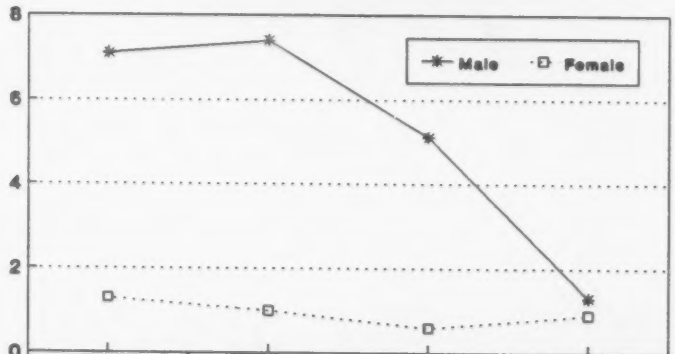


Figure 25

At Risk for Chronic Drinking By Sex, 1987-1990



	1987	1988	1989	1990
Male	7.1	7.4	5.1	1.3
Female	1.3	1	0.6	0.9

Figure 26

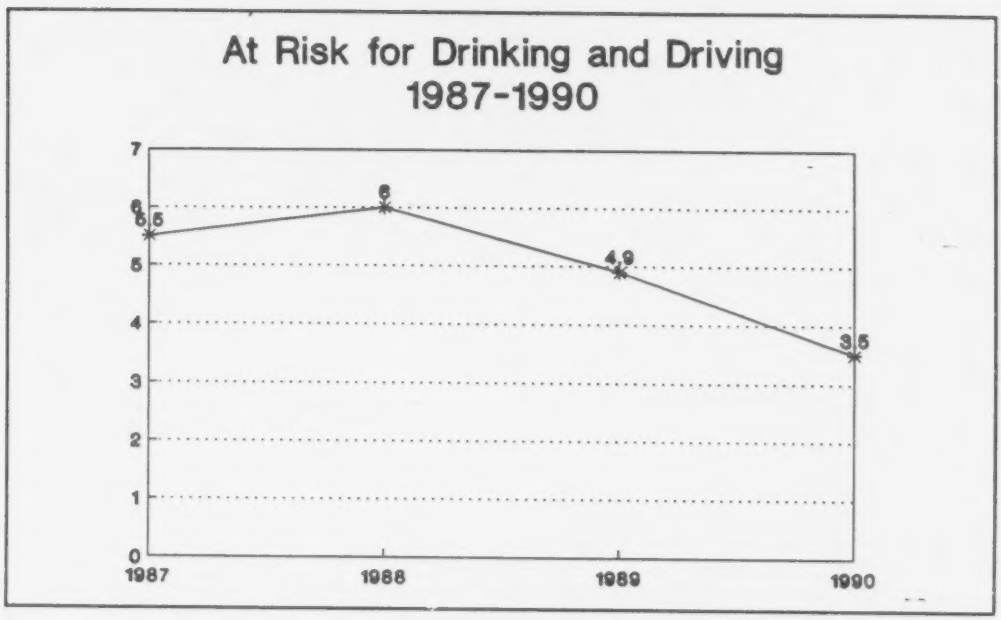
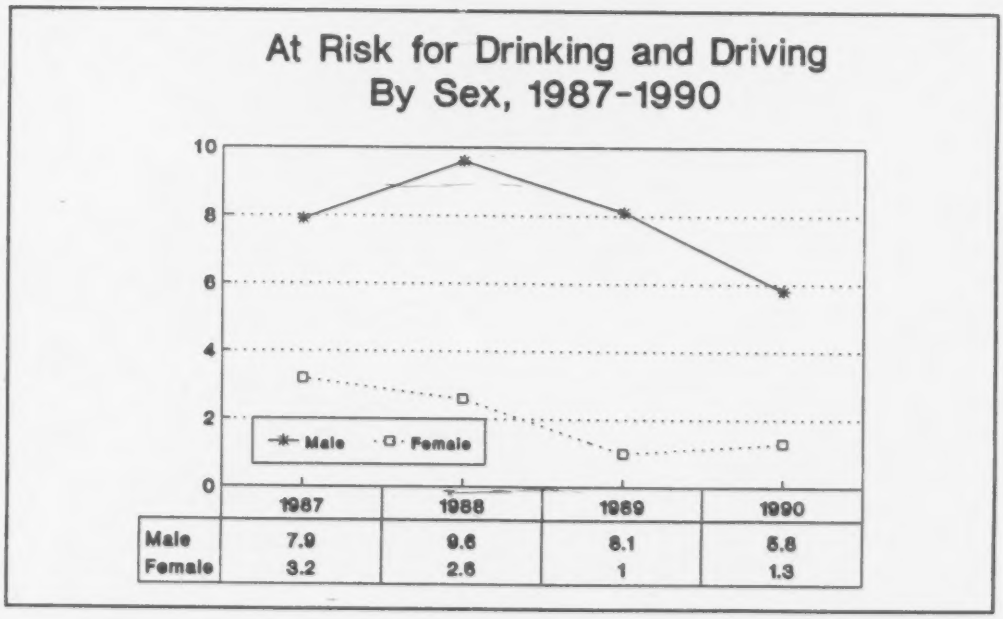


Figure 27



Preventive Health Practices

Preventive Health Practices

SOUTH DAKOTA	RANK OUT OF 45 STATES	RANGE FOR 45 STATES
14.9%	32	4.4%-19.7%

Cholesterol - An estimated 14.9 percent of South Dakota adults are considered at risk for high cholesterol with females at a significantly greater risk than males (17.5 percent versus 1.2 percent)(see Figure 28).

Almost 60 percent of the population reported ever having their cholesterol level checked with 79.6 percent of those reporting having it checked within the past year (see Figures 29 and 30). Just over 15 percent of the survey population reported being advised by a doctor to reduce their cholesterol. Of those, 28.8 percent had medication prescribed to lower their cholesterol and 84.6 percent were on low fat\low cholesterol diets.

BRFSS Definition: Respondents with a reported cholesterol level of 200 mg/dL or greater.

Routine Checkup - Based on the BRFSS definition, over 62 percent of the survey population reported having a routine checkup within the past year (see Figure 31). Over 73 percent of the female survey respondents reported having a routine checkup within the past year compared to only 50.5 percent of the males (see Figure 32).

BRFSS Definition: A visit to the doctor when respondent was feeling well and had not been sick.

Trends . . .

No trend analysis was done for cholesterol or routine checkups due to lack of sufficient data.

Of the 45 states participating in the BRFSS, South Dakota had the 14th highest prevalence of risk for high cholesterol. The national average was 13.6 percent,

ranging from a low of 4.4 percent in the District of Columbia to a high of 19.7 percent in Rhode Island.

Progress Toward Year 2000 . . .

The Year 2000 Health Objective for cholesterol is to increase to at least 75 percent the proportion of adults who have had their blood cholesterol checked within the preceding five years.

In 1990, 59.4 percent of the adult population of South Dakota reported "ever" having their cholesterol checked indicating that South Dakota fell short of the 75 percent goal.

There are no Year 2000 Health Objectives which address routine checkups.

Figure 28

At Risk for Cholesterol Level By Sex

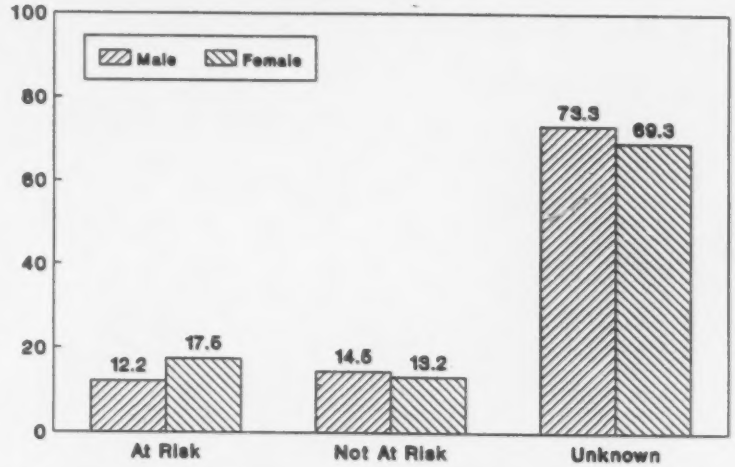


Figure 29

How Long Since Blood Cholesterol Last Checked

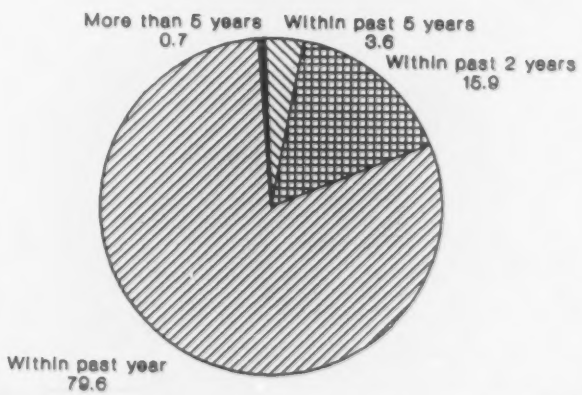


Figure 30

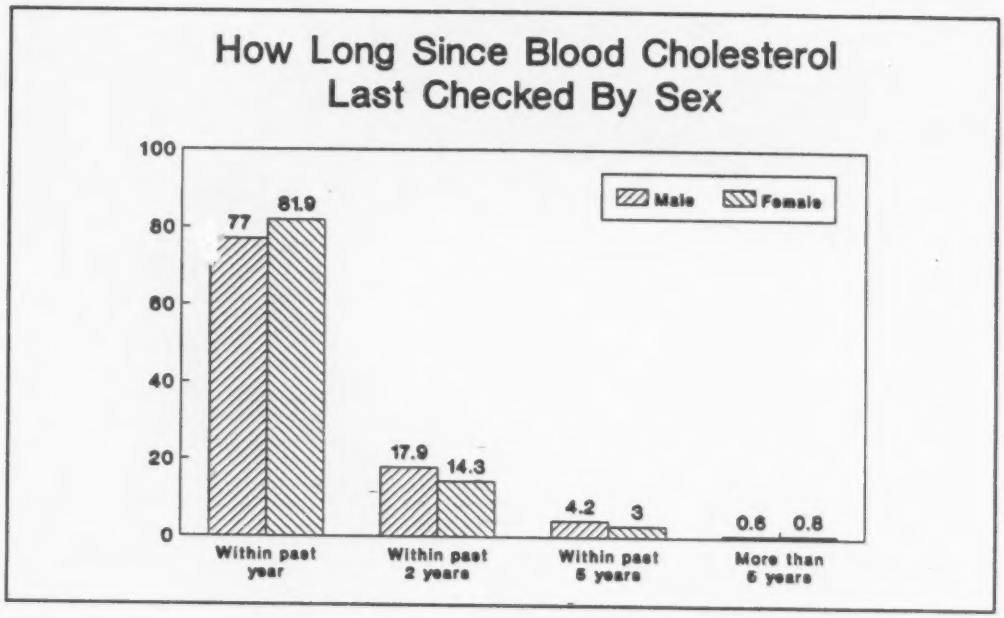


Figure 31

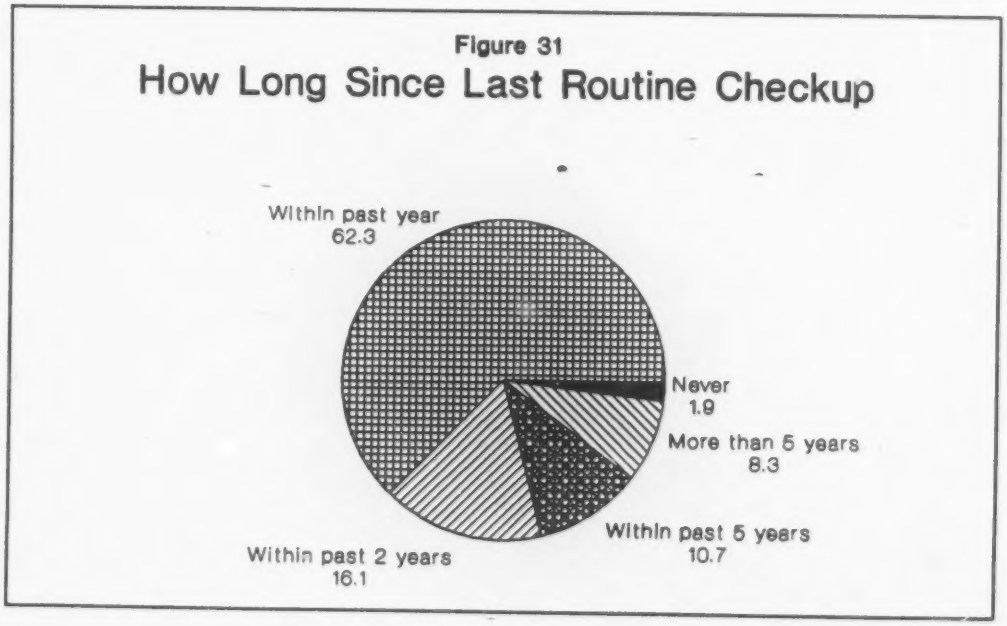
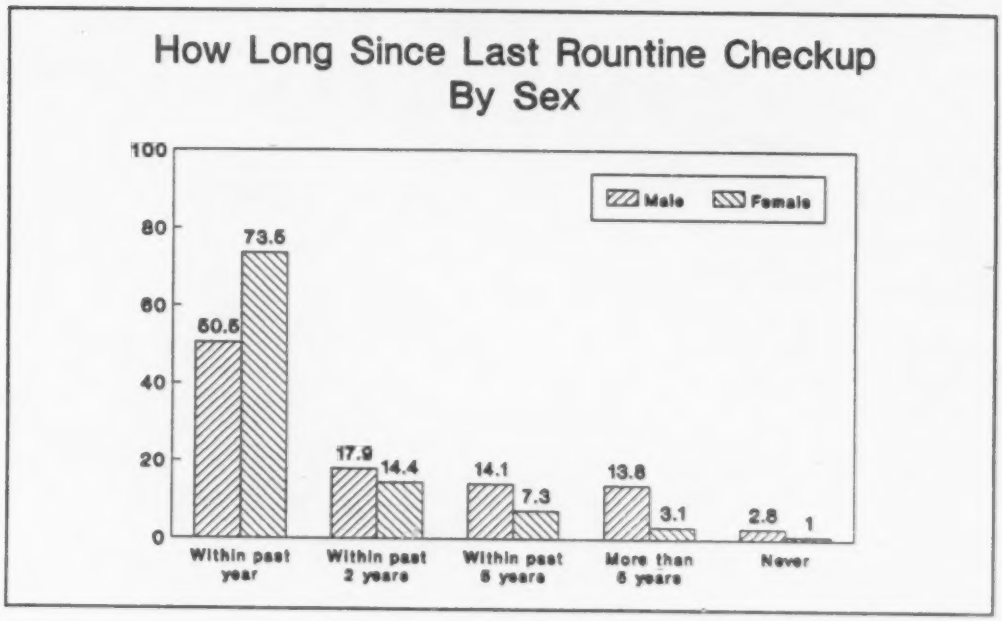


Figure 32


How Long Since Last Rountine Checkup
By Sex
100
80
60
40
20
0
Male
Female
60.6
73.6
17.9
14.4
14.1
7.3
13.8
3.1
2.8
1
Within past year
Within past 2 years
Within past 5 years
More than 5 years
Never

Women's Health

Women's Health

SOUTH DAKOTA	RANK OUT OF 45 STATES	RANGE FOR 45 STATES
46.2%	24	37.4%-53.9%

Mammography - Less than half (46.2 percent of the adult female population in South Dakota reported "ever" having had a mammogram. Those women age 45-54 reported the highest percentage at 75.6 percent followed closely by women age 55-64 at 74.7 percent.

Table 12 shows that those women with an annual income of less than $10,000 were less likely to ever have had a mammogram at 40.5 percent compared to the 67.2 percent for women in the over $50,000 income range.

Of those women who have had a mammogram, 62 percent had one within the past year (see Figure 33). Table 13 shows a breakdown, by income, of time since last mammogram.

The great majority of mammograms were performed as part of a routine checkup (see Figure 34). Women who had "never" had a mammogram were asked to cite the most important reason for not having one. Almost 77 percent responded that is was not needed or it wasn't recommended (see Figure 35). Only 4.6 percent cited the cost or no insurance as reasons for never having a mammogram. Those who had had a mammogram in the past year were asked the most important reason they hadn't had one in the past year. Over 63 percent said it was not needed or it wasn't recommended (see Figure 35). Only 4.2 percent cited cost or no insurance as a factor.

Over 91 percent of the women had "ever" had a breast physical examination by a doctor or medical practitioner with 68.8 percent of those having one within the past year (see Figure 36).

Pap Tests - While 95.2 percent of the female survey population reported "ever" having a Pap smear test, only 63.7 percent had had one within the past year (see Figure 37).

Trends . . .

No trend analysis was done for mammography or Pap tests due to lack of sufficient data.

South Dakota ranked 22nd highest in the

percent of the adult female population who reported ever having a mammogram at 46.2 percent. This compares to a high of 53.9 percent in Connecticut and a low of 37.4 percent in Nebraska. The national median for percent of women ever having a mammogram was 46.2 percent.

Progress Toward Year 2000 . . .

The Year 2000 Health Objective for mammography calls for an increase to at least 80 percent the proportion of women age 40 and older who have ever received a clinical breast examination and a mammogram and to at least 60 percent those age 50 and older who have received them within the preceding 1 to 2 years.

While BRFSS age categories do not directly correspond to the Year 2000 Health Objectives, data indicates that South Dakota met the 80 percent goal for clinical breast examinations with between 80.3 and 97.9 percent of women aged 35 and older ever having had one, but fell short of that goal for mammography with only between 55.9 and 75.6 percent of women in the same age category reporting ever having had one. In 1990, South Dakota exceeded the 60 percent objective with between 82.3 and 84.3 percent of the women aged 45 and older having had a mammogram in the preceding two years and between 80.3 and 87.0 percent having a clinical breast examination during the same time period.

The Year 2000 Health Objective for Pap tests is to increase to at least 95 percent the proportion of women age 18 and older with uterine cervix who have ever received a Pap test, and to at least 85 percent those who received a Pap test within the preceding 1 to 3 years. Over 95 percent of South Dakota women reported "ever" having a Pap test. While the breakdown for time since last Pap test in BRFSS and Year 2000 doesn't match exactly, data for South Dakota do show that 80.6 percent of the women had a Pap test within the preceding 1 to 2 years.

Table 12
Percent of Women Having Ever Had A Mammogram By Income

	Yes		No	
	N	%	N	%
< $10,000	92	40.5	117	59.5
$10-$15,000	78	46.9	69	52.3
$15-$20,000	52	40.2	68	59.8
$20-$25,000	49	43.1	60	56.9
$25-$35,000	60	44.5	69	55.5
$35-$50,000	40	47.3	41	52.7
> $50,000	46	47.2	21	32.8
Unk./Refused	75	51.6	60	43.8

Figure 33
How Long Since Last Mammogram

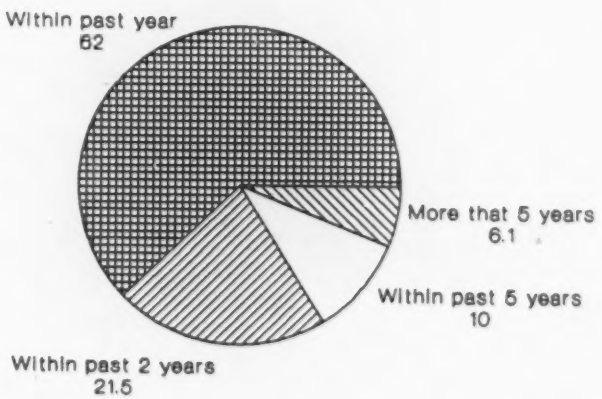


Table 13
How Long Since Last Mammogram By Income

	Within Past Year		Within Past Two Years		Within Past Five Years		More Than Five Years	
	N	%	N	%	N	%	N	%
< $10,000	58	63.9	20	19.3	7	7.7	5	7.5
$10-$15,000	47	63.1	11	11.5	15	19.4	5	6.0
$15-$20,000	35	67.9	9	19.2	4	6.6	4	6.4
$20-$25,000	27	52.6	12	26.5	6	11.6	4	9.3
$25-$35,000	37	62.1	15	24.7	4	5.4	4	7.8
$35-$50,000	20	53.8	13	32.0	7	14.2	-	-
> $50,000	31	67.7	10	21.4	3	7.5	2	3.4
Unk./Refused	49	63.1	15	21.8	6	8.0	4	6.4

Figure 34

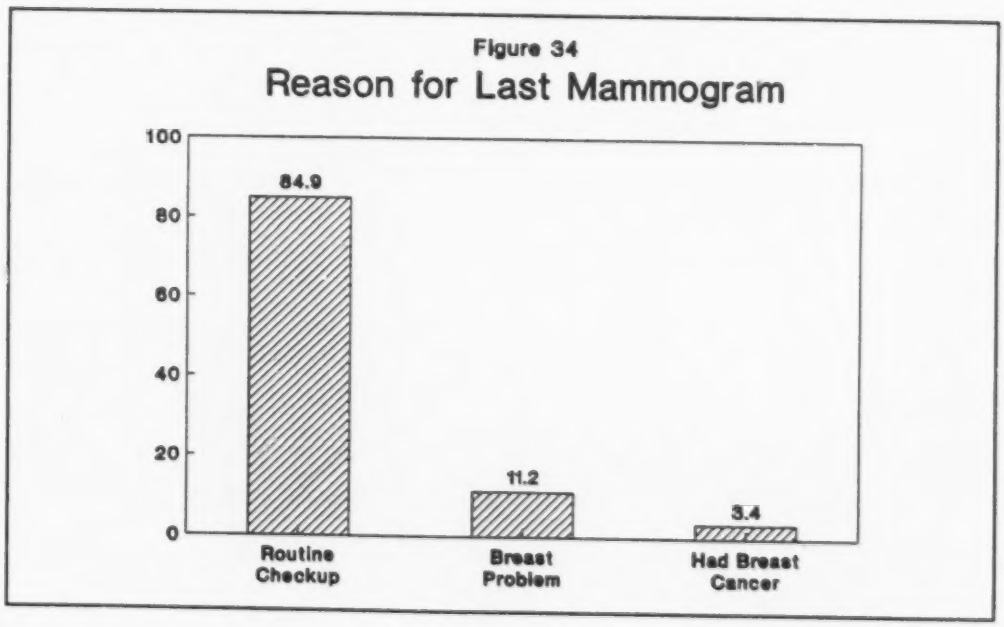


Figure 35

Reason for Not Having Mammogram

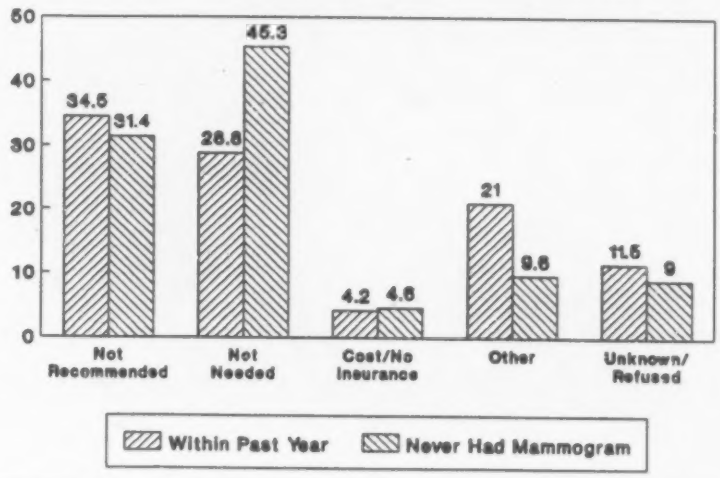


Figure 36

How Long Since Last Breast Physical Exam

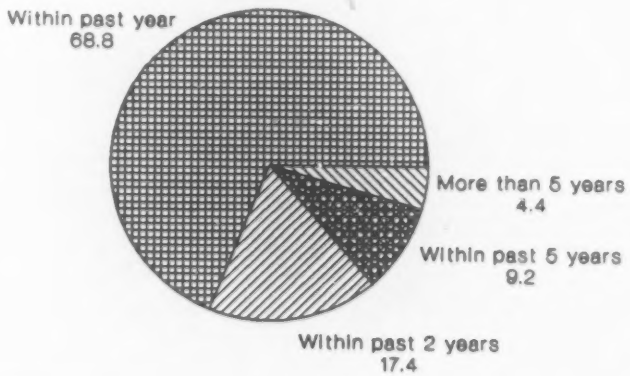
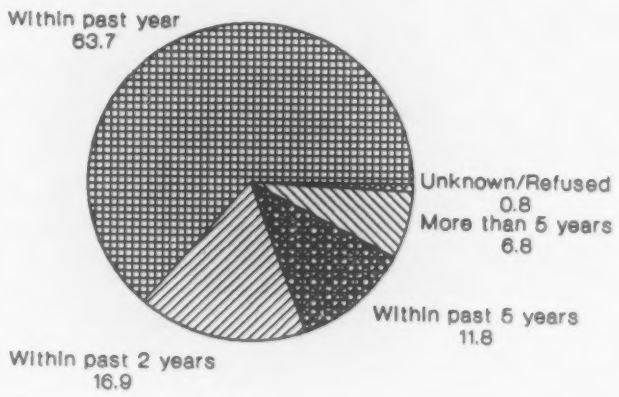


Figure 37

How Long Since Last Pap Test



AIDS

AIDS

In 1990 questions were added to the core BRFSS survey to measure South Dakota residents' beliefs and opinions about the national health problem of AIDS. Over 78 percent of survey respondents had heard the AIDS virus called HIV (see Figure 38).

Nearly half of the respondents correctly believed there were drugs available which lengthen the life of a person with the AIDS virus while 31.8 percent didn't know (see Figure 39). Almost 67 percent correctly felt that a person with the AIDS virus could look and feel healthy and well compared to 13 percent who didn't believe that to be true (see Figure 40).

When asked if a person could get the AIDS virus by "giving" blood, 21.7 percent incorrectly believed they could while over 9 percent didn't know (see Figure 41). One third of the respondents either incorrectly believed or didn't know if a person could get the AIDS virus from mosquitoes or other insects (see Figure 42).

When people with children in kindergarten through eighth grade were asked if they would allow their child in the same classroom as a child with the AIDS virus, 82.1 percent said they would while 17.9 percent either didn't know or would not allow it (see Figure 43). An overwhelming number of parents (87.7 percent) felt their children should begin AIDS education in grades 1-6 with 61 percent of those believing education should begin before or during third grade (see Figure 44). Only 1.5 percent felt their child should receive no AIDS education in school.

Over half of the respondents wouldn't eat in a restaurant where the cook had the AIDS virus with another 18.7 percent unsure whether they would or not (see Figure 45). Over 64 percent said they would work with someone who had the AIDS virus, 19.4 percent said they would not, and 16.4 percent didn't know (see Figure 46).

Almost 40 percent of the respondents said they would go to a private physician to be tested for the AIDS virus (see Figure 47) with 26.1 percent said they would go to a hospital or emergency room.

When asked about the effectiveness of condoms in preventing the AIDS virus, 29.8 percent responded they were very effective, 51.1 percent correctly said they were somewhat effective and 5.9 percent said they were not at all effective (see Figure 48).

Trends . . .

No trend analysis was done for AIDS due to the lack of sufficient data.

Progress Toward Year 2000 . . .

The Year 2000 Health Objective for HIV infection relate to health status, risk reduction, public awareness, professional education and awareness, and service and protection. They do not include objectives related to AIDS as collected by the BRFSS.

Figure 38

Have You Heard the AIDS Virus Called HIV

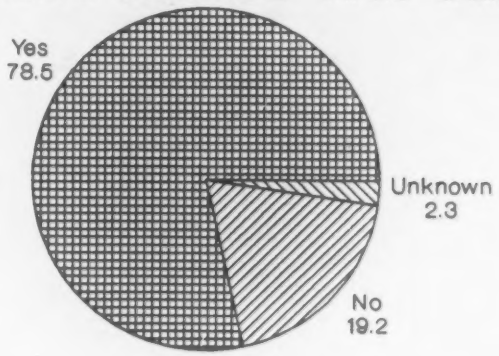


Figure 39

Are There Drugs Available Which Lengthen the Life of a Person With the AIDS Virus

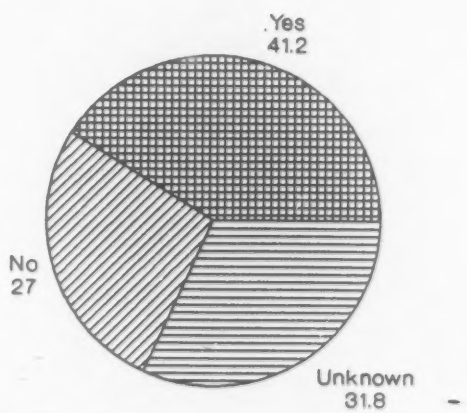


Figure 40

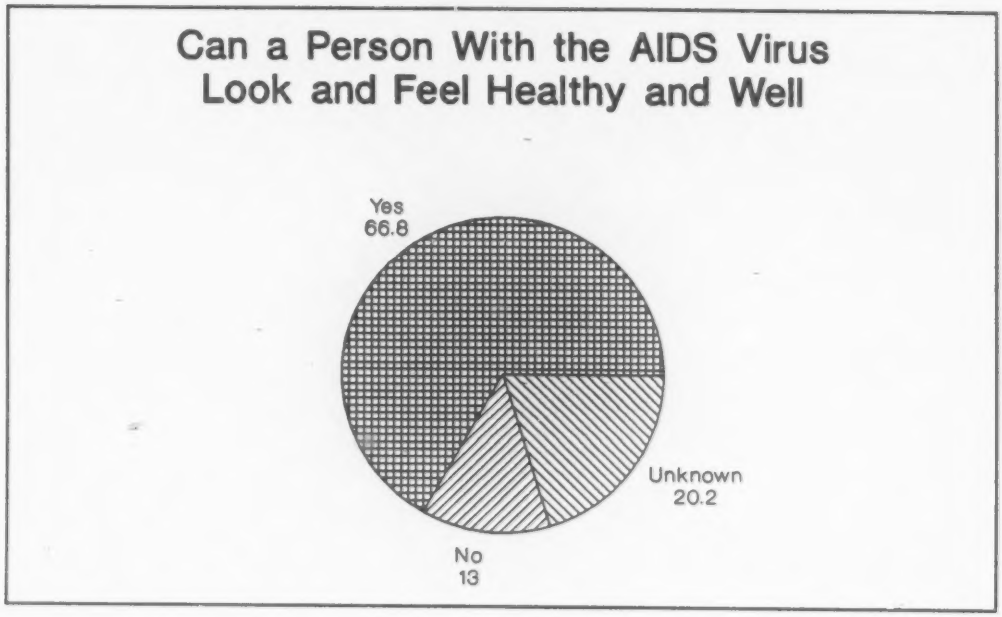


Figure 41

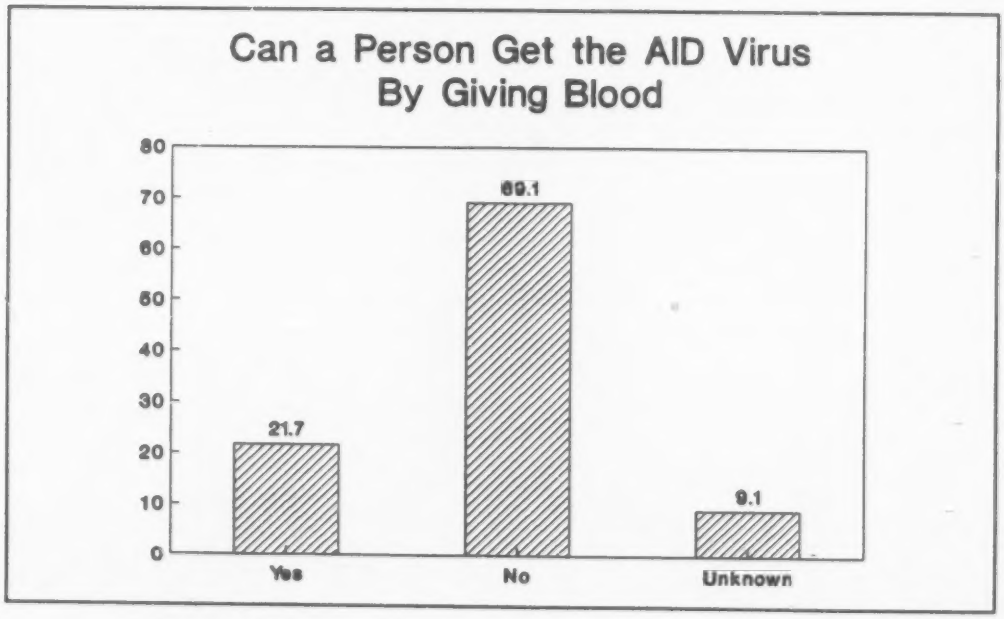


Figure 42

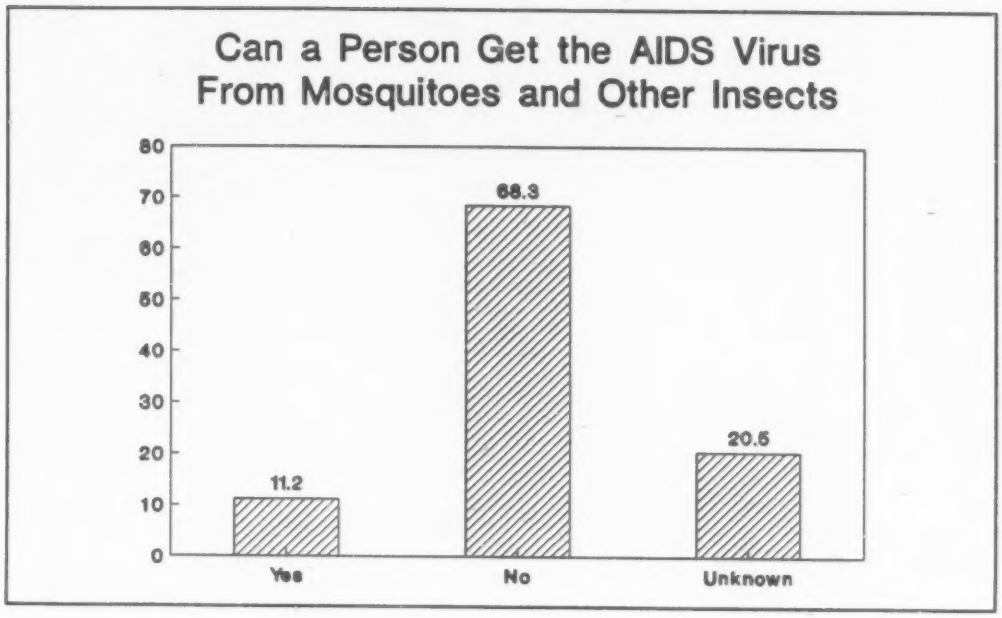


Figure 43

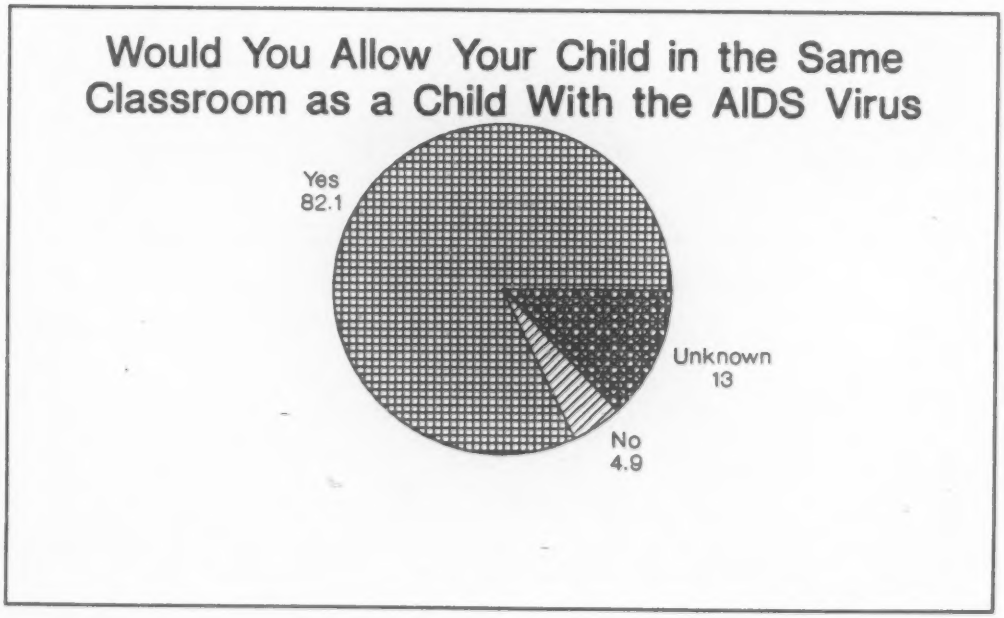


Figure 44

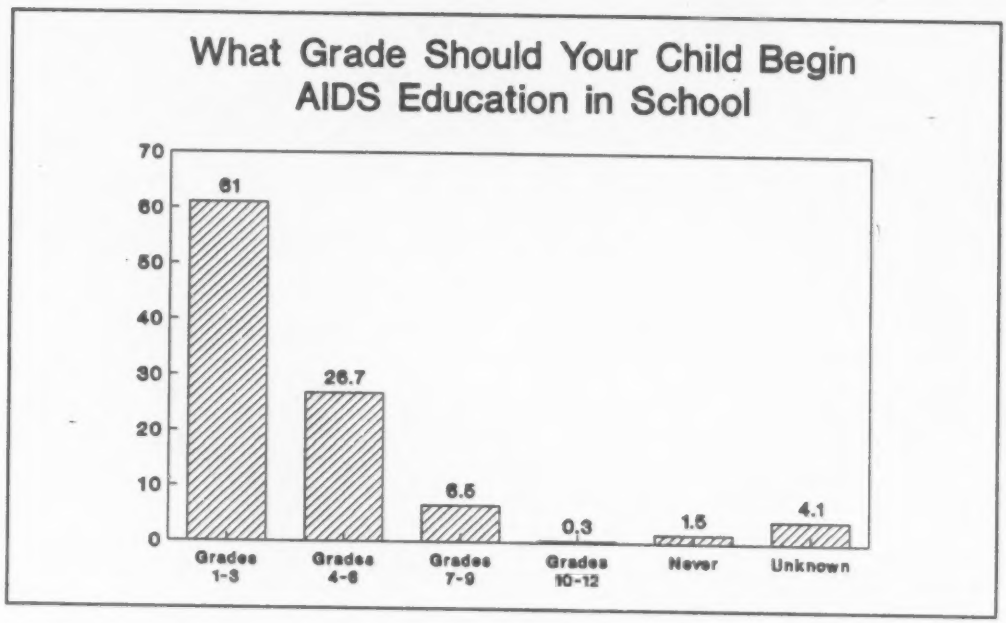


Figure 45

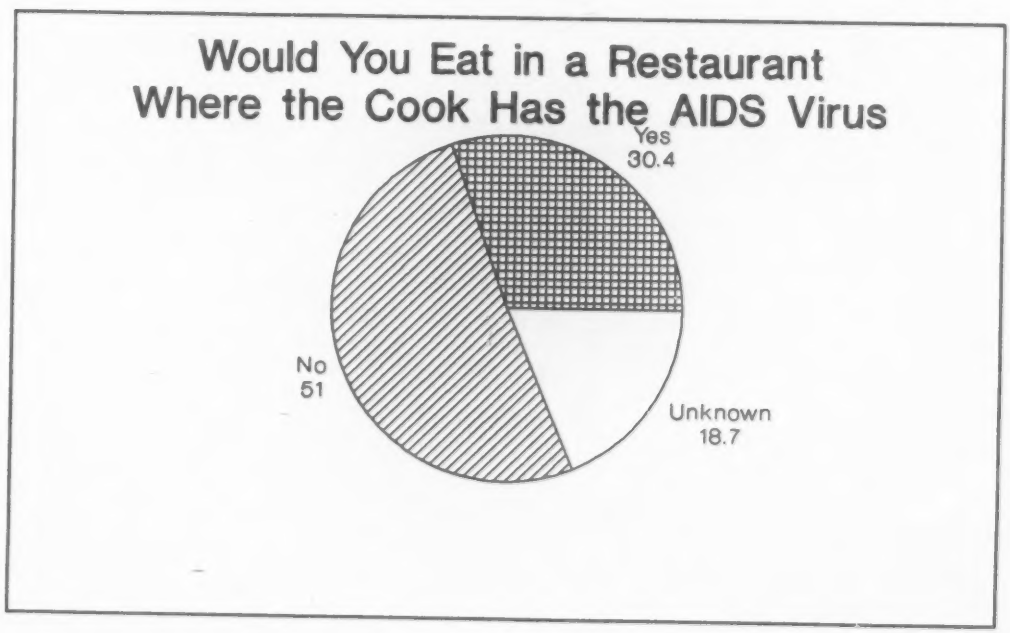


Figure 46

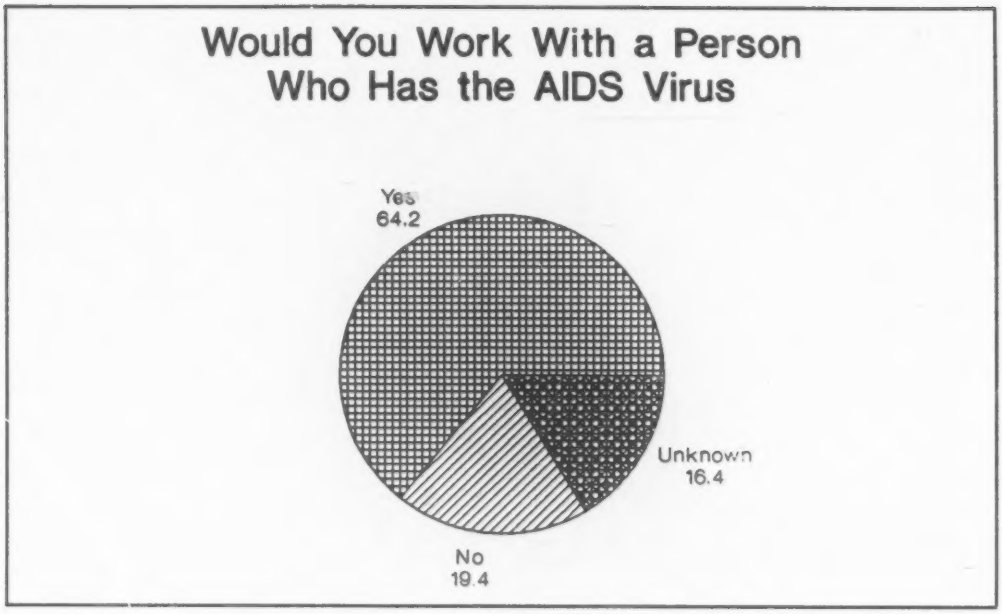


Figure 47

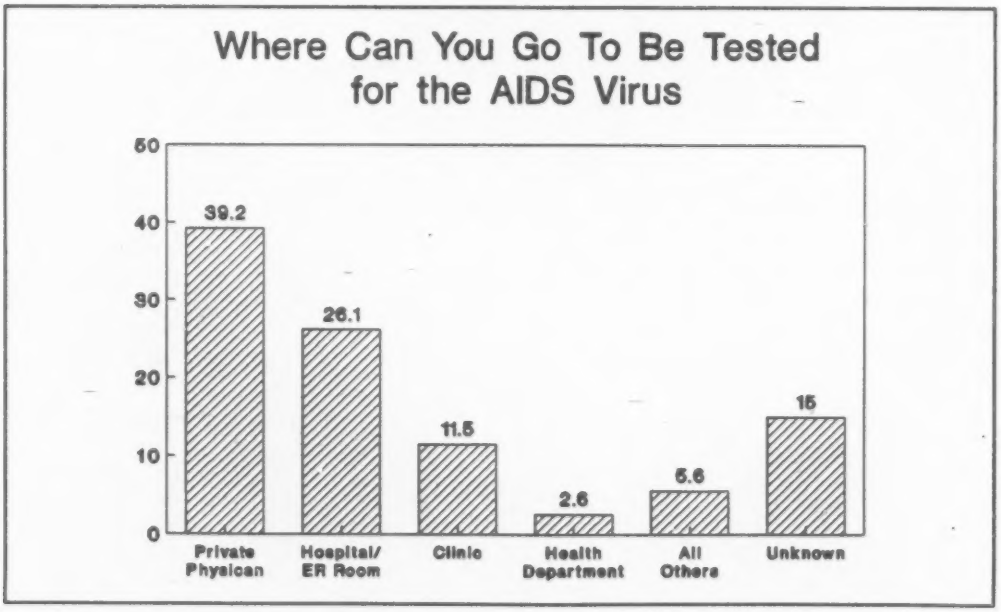
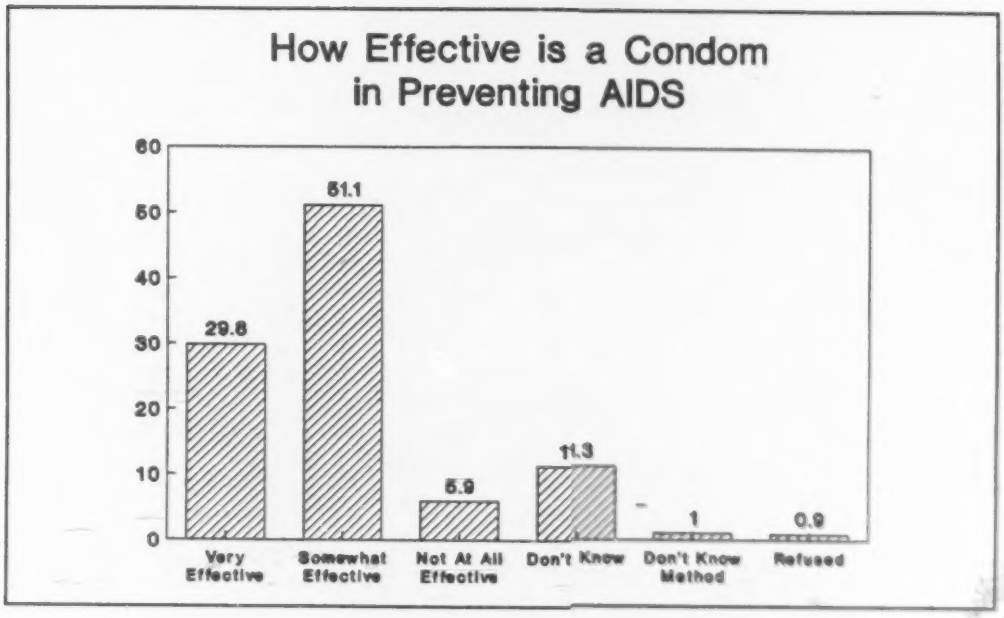


Figure 48


How Effective is a Condom in Preventing AIDS
60
50
40
30
20
10
0
29.8
51.1
5.9
11.3
1
0.9
Very Effective
Somewhat Effective
Not At All Effective
Don't Know
Don't Know Method
Refused

State Questions

State Questions

Each year the South Dakota Department of Health selects topics which aren't covered in the core BRFSS questionnaire to be developed and included in a state module which is added to the end of the survey. During the 1990 BRFSS survey year those selected topics were distance to health care professional, health insurance and health costs, and child restraints. Data presented for the state questions are not weighted and therefore should not be interpreted as being representative of the state's population as a whole.

Distance to Health Professional - Figure 49 shows that 63.6 percent of the survey respondents lived within five miles of their health care professional. This compares to the 18.5 percent who lived within 6-20 miles and the 13.5 percent who lived 21-60 miles away. Just over three percent of the survey respondents lived more than 60 miles away.

Health Insurance/Health Costs - Almost 90 percent of the adult South Dakotans surveyed said they had health insurance while 9.3 percent did not (see Figure 50). When asked if the cost of health care had ever influenced their decision to receive care, 28.9 percent said it had while 68.5 percent responded cost had not influenced them (see Figure 51).

Child Restraint - When respondents with children under the age of five were asked how often their child was buckled in a car safety seat/seat belt, 68.2 percent responded all of the time (see Figure 52). Only 4.5 percent said rarely or never when asked the same question. However, when respondents with children between the ages of 5 and 17 were asked how often their child was buckled in a seat belt when riding in a car, only 29.1 percent responded all the time (see Figure 53). Over 20 percent responded rarely or never.

Figure 49

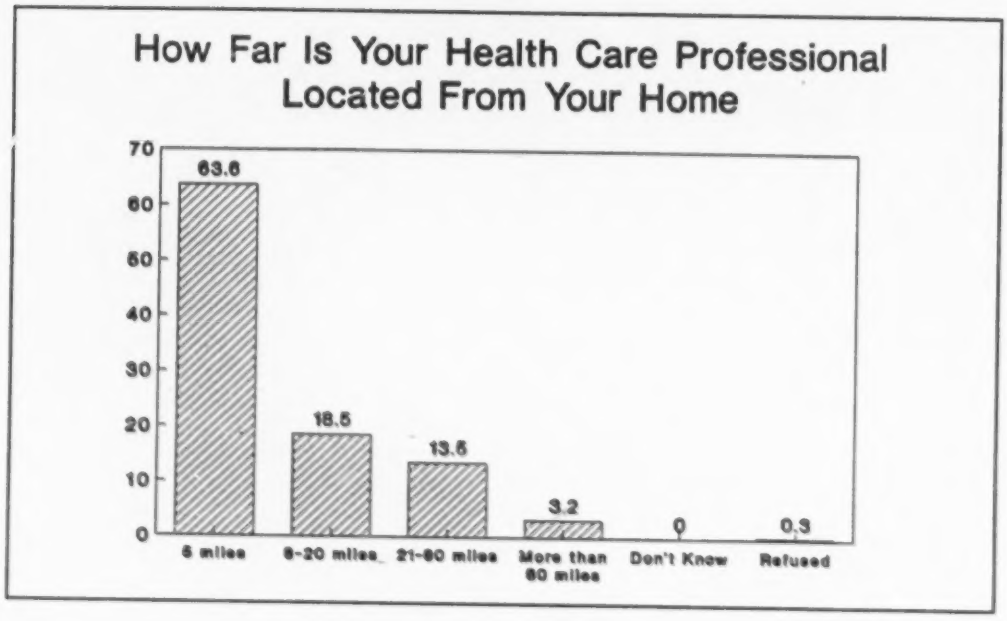


Figure 50

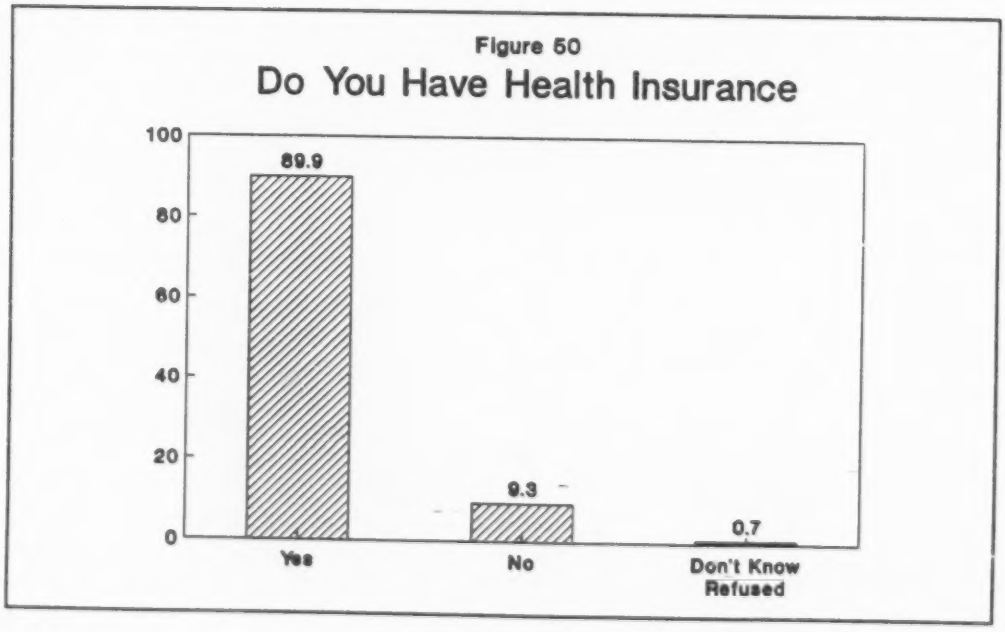


Figure 51

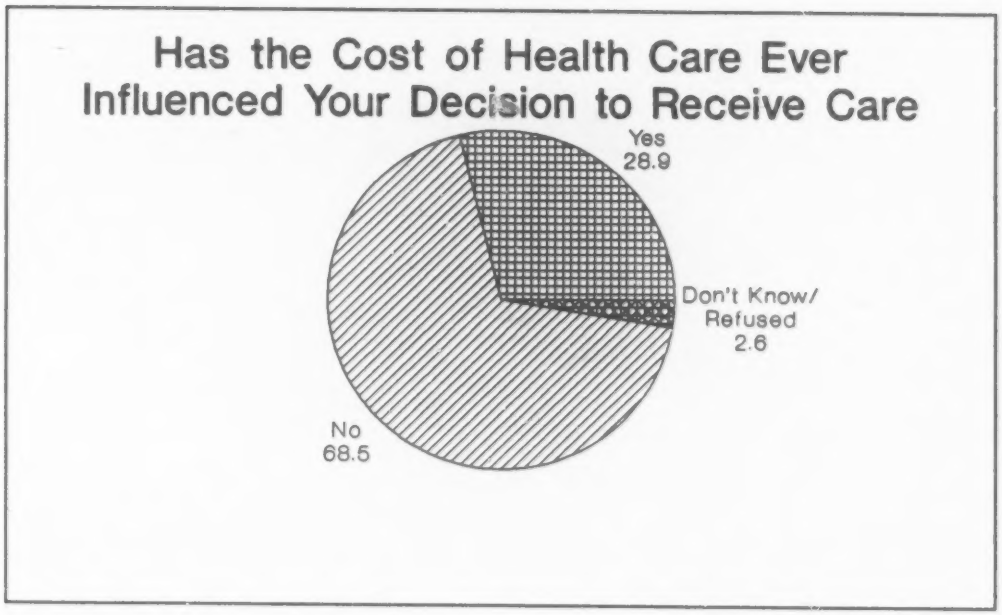


Figure 52

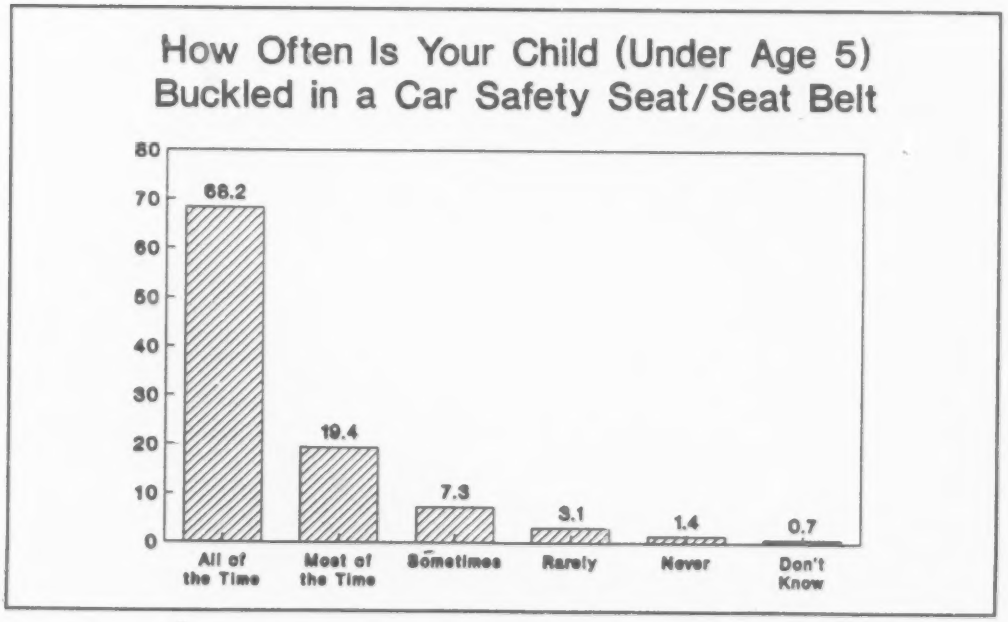
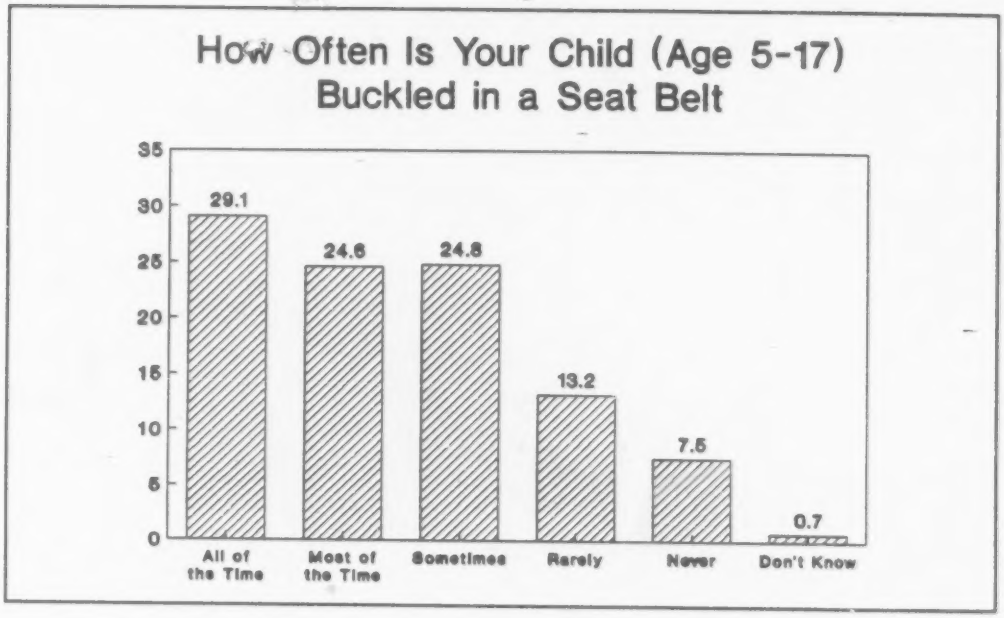


Figure 53


How Often Is Your Child (Age 5-17) Buckled in a Seat Belt
35
30
25
20
15
10
5
0
29.1
24.6
24.8
13.2
7.5
0.7
All of the Time
Most of the Time
Sometimes
Rarely
Never
Don't Know

CONCLUSION

Conclusion

Risk prevalence data such as that collected by the Behavioral Risk Factor Surveillance System allow the South Dakota Department of Health to identify those groups of adult South Dakotans who are "at risk" for adverse health outcomes due to their behaviors and lifestyles for the purpose of targeting intervention efforts specifically designed to meet the unique needs of those "at risk" groups. Following the trends that develop over the years will allow the department to monitor the progress of these efforts.

An overview of the prevalence of behavioral risk factors from 1987 to 1990 is summarized in Table 14.

Table 14

Proportion of Adult Population At Risk
By Specific Behavioral Risk Factor
South Dakota, 1987-1990

	1990	1989	1988	1987
Lack of Seat Belt Use	57.4%	61.9%	67.4%	72.0%
Hypertension	19.3%	15.6%	16.9%	17.4%
Sedentary Lifestyle	56.6%	54.1%	56.8%	58.0%
Overweight	27.5%	25.4%	27.6%	26.9%
Cigarette Smoking	20.7%	21.8%	21.1%	25.2%
Smokeless Tobacco	4.9%	N/A	N/A	4.4%
Acute Drinking	15.8%	17.8%	19.3%	20.4%
Chronic Drinking	2.1%	2.8%	4.1%	4.1%
Drinking and Driving	3.5%	4.9%	6.0%	5.5%
SAMPLE SIZE	1,799	1,784	1,179	1,185

N/A = Not available because the topic was not part of that year's survey.

Note: Definitions of each risk factor are listed in Appendix A. For 1987 and 1988 data, the proportions are weighted based on 1986 population estimates for the state. For 1989, the data is weighted using 1987 population estimates and for 1990 the data was weighted using 1989 population estimates.

Appendix A

1990 Behavioral Risk Factor Questionnaire

FIPS STATE CODE	STRATUM CODE	PSU NUMBER	RECORD NUMBER	DATE OF INTERVIEW (MM DD YY)	ID
4 6	1			9 0	

HELLO. I'm _____ calling for the South Dakota Department of Health. We're doing a study of the health practices of South Dakota residents. Your number has been chosen randomly by the Health Department to be included in the study, and we'd like to ask some questions about things people do which may affect their health.

Is this [ ] ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ?

→ Thank you very much, but I seem to have dialed the wrong number. It's possible that your number may be called at a later time. STOP

Is this a private residence?

→ Thank you very much, but we are only interviewing in private residences. STOP

	Date	Time	Time	Time	Time	ID	Comments
Line busy							
No answer							

Appointments:

	Today's date/time	Speak with	Ask for	Call back date & time	ID	Comments
1.						
2.						

Refusals:

	Date/time	Spoke with	ID	Comments
1st:				
2nd:				

Call Disposition Codes

01 - Completed interview	07 - No eligible respondent could be reached during time period
02 - Refused interview	08 - Language barrier prevented completion of interview
03 - Non-working number	09 - Interview terminated within questionnaire
04 - No answer (multiple times)	10 - Line busy (multiple times)
05 - Business phone	11 - Refusal/respondent unable to respond because of physical or mental impairment
06 - No eligible respondent at this number	

Edited by: _____

Date: _ _ _

Final disposition of telephone call: [ ] [ ] (CD-125)

Wind down: [ ] (CD)

(2)

Our study requires that we interview only one person who lives in your household. How many members of your household, including yourself, are 18 years of age or older? [ ] (HH) 0 "0" → Page 3

How many are men and how many are women? Men [ ] (HH) Women [ ] (HH)

Who is the oldest man who presently lives in this household?
Who is the next oldest man who presently lives in this household?
Etc

Who is the oldest woman who presently lives in this household?
Who is the next oldest woman who presently lives in this household?
Etc

Suffix: ___ ___ ___ ___

Name or Relationship	Last digit of phone number 0	1	2	3	4	5	6	7	8	9	
1.	1	1	1	1	1	1	1	2	1	1	1.
2.	2	1	2	1	2	1	2	1	2	1	2.
3.	3	1	3	2	1	2	3	1	3	X	3.
4.	1	2	3	4	1	2	3	4	X	X	4.
5.	2	3	4	5	1	2	3	4	5	1	5.
6.	5	6	1	2	3	4	X	X	X	X	6.
7.	2	2	4	5	6	7	1	X	X	X	7.
8.	8	1	2	3	4	5	6	7	X	X	8.

The person in your household that I need to speak with is _____

0 "new" → Page 3

To correct respondent: Hello. I'm _____ calling for the S.D. DEPT. OF HEALTH. I'm a member of a special research team. We're doing a study of SOUTH DAKOTA residents regarding their health practices and day-to-day living habits. You have been randomly chosen to be included in the study from among the adult members of your household.

(3)

The interview will only take a short time, and all the information obtained in this study will be confidential. First, I'd like to begin by asking you about using seat belts. . . .

SECTION A: SEAT BELTS

1. How often do you use seat belts when you drive or ride in a car?

Would you say: PLEASE READ (31)

- a. Always . . . 1
- b. Nearly Always . . . 2
- c. Sometimes . . . 3
- d. Seldom . . . 4
- OR
- e. Never . . . 5

DO NOT READ THESE RESPONSES

- Don't know/Not sure . . . 7
- Never drive or ride in a car . . . 8
- Refused . . . 9

SECTION B: HYPERTENSION

These next questions are about hypertension or high blood pressure.

2. Have you ever been told by a doctor, nurse, or other health professional that you have high blood pressure? (32)

- a. No GO TO SECTION C (p.4) . . . 1

PROBE FOR DOCTOR, NURSE OR OTHER HEALTH PROFESSIONAL

- b. Yes, by a doctor . . . 2
- c. Yes, by a nurse . . . 3
- d. Yes, by other health professional . . . 4

- Don't know/Not sure GO TO SECTION C (p.4) . . . 7
- Refused GO TO SECTION C (p.4) . . . 9

(4)

3. Have you been told on more than one occasion that your blood pressure was high, or have you been told this only once? (33)

- a. More than once . . . 1
- b. Only once . . . 2
- Don't know/Not sure . . . 7
- Refused . . . 9

4. Is any medicine currently prescribed for your high blood pressure? (34)

- a. Yes . . . 1
- b. No GO TO SECTION C (p.5) . . . 2
- Don't know/Not sure GO TO SECTION C (p.5) . . . 7
- Refused GO TO SECTION C (p.5) . . . 9

5. Are you currently taking medicine for your high blood pressure? (35)

PROBE FOR "All or most of the time" OR "Only occasionally" IF NECESSARY.

- a. Yes, all or most of the time . . . 1
- b. Yes, only occasionally . . . 2
- c. No . . . 3

IF ANSWER IS "Yes", ONE "Yes, all or most of the time."

- Don't know/Not sure . . . 7
- Refused . . . 9

SECTION C: EXERCISE

The next few questions are about exercise, recreation, or physical activities other than your regular job duties.

6 During the past month, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise? (36)

a. Yes 1
b. No GO TO SECTION D (p.8) 2
Don't know/Not sure GO TO SECTION D (p.8) . . . 7
Refused GO TO SECTION D (p.8) 9

7. What type of physical activity or exercise did you spend the most time doing during the past month? (37-38)

a. Activity (specify): _____ — —
See Coding List A

Refused GO TO Q 11 (p.6) 9 9

ASK QUESTION 8 ONLY IF ANSWER TO QUESTION 7 IS RUNNING, JOGGING, WALKING, OR SWIMMING. ALL OTHERS, GO TO QUESTION 9 (p.6).

8. How far did you usually walk/run/jog/swim? (39-41)

SEE CODING LIST B IF RESPONSE IS NOT IN MILES AND TENTHS

a. Miles and tenths . . . . . — — .—
Don't know/Not sure 7 7 7
Refused 9 9 9

9. How many times per week or per month did you take part in this activity during the past month? (42-44)

a. Times per week . . . . . 1 — —
b. Times per month . . . . . 2 — —
Don't know/Not sure 7 7 7
Refused 9 9 9

10. And when you took part in this activity, for how many minutes or hours did you usually keep at it? (45-47)

a. Hours & Minutes . . . . . — :— —
Don't know/Not sure 7 7 7
Refused 9 9 9

11. Was there another physical activity or exercise that you participated in during the last month? (48)

a. Yes 1
b. No GO TO SECTION D (p.8) 2
Don't know/Not sure GO TO SECTION D (p.8) . . . 7
Refused GO TO SECTION D (p.8) 9

12. What other type of physical activity gave you the next most exercise during the past month? (49-50)

a. Activity (specify): _____ — —
See Coding List A

Refused GO TO SECTION D (p.8) 9 9

ASK QUESTION 13 ONLY IF ANSWER TO QUESTION 12 IS RUNNING, JOGGING, WALKING, OR SWIMMING. ALL OTHERS GO TO QUESTION 14.

13. How far did you usually walk/run/jog/swim? (51-53)

SEE CODING LIST B IF RESPONSE IS NOT IN MILES AND TENTHS

a. Miles and tenths . . . . . — — .—
Don't know/Not sure 7 7 7
Refused 9 9 9

14. How many times per week or per month did you take part in this activity? (54-56)

a. Times per week . . . . . 1 — —
b. Times per month . . . . . 2 — —
Don't know/Not sure 7 7 7
Refused 9 9 9

15. And when you took part in this activity, for how many minutes or hours did you usually keep at it? (57-59)

a. Hours & minutes . . . . . — :— —
Don't know/Not sure 7 7 7
Refused 9 9 9

SECTION D: TOBACCO USE

Now I'd like to ask you a few questions about cigarette smoking.

16. Have you smoked at least 100 cigarettes in your entire life? (60)

100 CIGARETTES = 5 PACKS

a. Yes 1
b. No GO TO SECTION E (p.10) 2
Don't know/Not sure GO TO SECTION E (p.10) . . . 7
Refused GO TO SECTION E (p.10) 9

17. Do you smoke cigarettes now? (61)

a. Yes 1
b. No GO TO Q 19 (p.9) 2
Refused GO TO SECTION E (p.10) 9

18. On the average, about how many cigarettes a day do you now smoke? (62-63)

1 PACK = 20 CIGARETTES

a. Number of cigarettes . . . . . — —
b. Don't smoke regularly 8 8
Refused 9 9

19. Have you ever made a serious attempt to stop smoking cigarettes? (64)

a. Yes 1
b. No GO TO SECTION E (p.10) 2
Refused GO TO SECTION E (p.10) 9

20. When was the start of your most recent quit attempt? (65)

- a. Past week 1
- b. Past 2 weeks 2
- c. Past month 3
- d. Past 6 months 4
- e. Past year 5
- f. More than 1 year ago 6
- Don't know/Not sure 7
- Refused 9

21. How long did you actually stay off cigarettes that time? (66)

- a. Less than one day 1
- b. One to 6 days 2
- c. Seven days to less than 3 months 3
- d. Three months to less than 6 months 4
- e. Six months to less than 1 year 5
- f. 1 or more years 6
- Don't know/Not sure 7
- Refused 9

INTERVIEWER GO TO SECTION E (p. 10)

22. About how long has it been since you last smoked cigarettes regularly? (67)

- a. Less than 1 month 1
- b. One month, but less than 3 months 2
- c. Three months, but less than 6 months 3
- d. Six months, but less than 1 year 4
- e. One or more years 5
- Don't know/Not sure 7
- Refused 9

SECTION E: ALCOHOL CONSUMPTION

These next few questions are about the use of beer, wine, wine coolers, cocktails, or liquor, such as vodka, gin, rum, or whiskey—all kinds of alcoholic beverages that people drink at meals, special occasions, or when just relaxing.

23. Have you had any beer, wine, wine coolers, cocktails, or liquor during the past month, that is, since _____? (68)

- a. Yes 1
- b. No *GO TO SECTION F (p. 12)* 2
- Refused *GO TO SECTION F (p. 12)* 9

24. During the past month, how many days per week or per month did you drink any alcoholic beverages, on the average? (69-71)

- a. Days per week . . . . . 1 _ _
- b. Days per month . . . . . 2 _ _
- Don't know/Not sure *GO TO Q.25 (p. 11)* . . 7 7 7
- Refused *GO TO Q.25 (p. 11)* 9 9 9

25. A drink is 1 can or bottle of beer, 1 glass of wine, 1 can or bottle of wine cooler, 1 cocktail, or 1 shot of liquor. On the days when you drank, about how many drinks did you drink on the average? (72-73)

- a. Number of drinks . . . . . _ _
- Don't know/Not sure 7 7
- Refused 9 9

26. Considering all types of alcoholic beverages, that is beer, wine, wine coolers, cocktails, and liquor, on drinks, how many times during the past month did you have 5 or more drinks on an occasion? (74-75)

- a. Number of times . . . . . _ _
- b. None 8 8
- Don't know/Not sure 7 7
- Refused 9 9

27. And during the past month, how many times have you driven when you've had perhaps too much to drink? (76-77)

- a. Number of times . . . . . _ _
- b. None 8 8
- Don't know/Not sure 7 7
- Refused 9 9

SECTION F: PREVENTIVE HEALTH PRACTICES

Some people visit a doctor for a routine checkup, even though they are feeling well and have not been sick.

28. About how long has it been since you last visited a doctor for a routine checkup?

Was it: *PLEASE READ* (78)

- a. Within the past year (0 TO 12 MONTHS AGO) . . . 1
- b. Within the past two years (13 TO 24 MONTHS AGO) . . 2
- c. Within the past five years (25 TO 60 MONTHS AGO) OR . . 3
- d. More than five years ago (61+ MONTHS AGO) . . . 4
- Don't know/Not sure *GO TO Q.30 (p. 13)* 7
- Never, *GO TO Q.30 (p. 13)* 8
- Refused *GO TO Q.30 (p. 13)* 9

29. What type of doctor did you see for your last routine check-up?

Was it: *PLEASE READ* (79)

- a. Family or General Practitioner 1
- b. Internist 2
- c. Specialist such as heart, lung, or stomach specialist . 3
- d. Other 4

(ASK FOR WOMEN ONLY)

- e. Obstetrician/Gynecologist 5
- Don't know/Not sure 7
- Refused 9

These next questions are about blood cholesterol, which is a fatty substance found in the blood.

30. Have you ever had your blood cholesterol checked? (30)

a. Yes 1
b. No *GO TO Q 37 (p.15)* 2
Don't know/Not sure *GO TO Q 37 (p.15)* 7
Refused *GO TO Q 37 (p.15)* 9

31. About how long has it been since you last had your blood cholesterol checked?

Was it: *PLEASE READ* (31)

a. Within the past year (0 TO 12 MONTHS AGO) 1
b. Within the past two years (13 TO 24 MONTHS AGO) 2
c. Within the past five years (25 TO 60 MONTHS AGO) OR 3
d. More than five years ago (61+ MONTHS AGO) 4
Don't know/Not sure 7
Refused 9

32. Have you ever been told your blood cholesterol level, in numbers? (32)

a. Yes 1
b. No *GO TO Q 34* 2
Don't know/Not sure *GO TO Q 34* 7
Refused *GO TO Q 34* 9

33. What is your blood cholesterol level? (33-35)

Record the number . . . . . — — —
Don't know/Not sure 7 7 7
Refused 9 9 9

34. Have you ever been told by a doctor or other health professional that your blood cholesterol is high? (36)

a. Yes 1
b. No 2
Don't know/Not sure 7
Refused 9

35. Are you now under the advice of a doctor to reduce your blood cholesterol or blood fat level? (37)

a. Yes 1
b. No *GO TO Q 37 (p.15)* 2
Don't know/Not sure *GO TO Q 37 (p.15)* 7
Refused *GO TO Q 37 (p.15)* 9

36. Did the doctor:

36a. —prescribe a medication to lower your blood cholesterol? (38)

a. Yes 1
b. No 2
Don't know/Not sure 7
Refused 9

36b. —provide you with a low fat or low cholesterol diet? (39)

a. Yes 1
b. No 2
Don't know/Not sure 7
Refused 9

36c. —refer you to a dietitian, nutritionist, or nurse to help you reduce the fat or cholesterol in your diet? (40)

a. Yes 1
b. No 2
Don't know/Not sure 7
Refused 9

37. Next, I'd like to ask you about diabetes, sometimes called sugar diabetes. Have you ever been told by a doctor that you have diabetes? (41)

a. Yes 1
b. No 2
Don't know/Not sure 7
Refused 9

SECTION G: DEMOGRAPHICS

These next few questions ask for a little more information about yourself.

38. How old were you on your last birthday? (42-43)

Code age in years . . . . . — —
Don't know/Not sure 0 7
Refused 0 9

39. What is your race?
Would you say: *PLEASE READ* (44)

a. White 1
b. Black 2
c. Asian, Pacific Islander 3
d. American Indian 4
e. Other: *specify* _____ 5
Don't know/Not sure 7
Refused 9

40. Are you of Hispanic origin such as Mexican American, Latin American, Puerto Rican, or Cuban? (45)

a. Yes 1
b. No 2
Don't know/Not sure 7
Refused 9

41. What is the highest grade or year of school you completed?
READ ONLY IF NECESSARY (96)

a. Eighth grade or less 1
b. Some high school 2
c. High school grad or GED certificate 3
d. Some technical school 4
e. Technical school graduate 5
f. Some college 6
g. College graduate 7
h. Post grad or professional degree 8
Refused 9

42. Are you currently: *PLEASE READ* (97)

a. Employed for wages 1
b. Self employed 2
c. Out of work for more than 1 year 3
d. Out of work for less than 1 year 4
e. Homemaker 5
f. Student 6
OR
g. Retired 7
Refused 9

43. And are you: *PLEASE READ* (98)

a. Married 1
b. Divorced 2
c. Widowed 3
d. Separated 4
e. Never been married 5
OR
f. A member of an unmarried couple 6
Refused 9

44. Which of the following categories best describes your annual household income from all sources? *PLEASE READ* (99)

a. Less than $10,000 1
b. $10 to $15,000 2
c. $15 to $20,000 3
d. $20 to $25,000 4
e. $25 to $35,000 5
f. $35 to $50,000 6
OR
g. Over $50,000 8
Don't know/Not sure 7
Refused 9

45. About how much do you weigh without shoes? (100-102)

a. Weight . . . . . ___ Pounds
Don't know/Not sure 7 7 7
Refused 9 9 9

46. About how tall are you without shoes? (103-105)

a. Height . . . . . ___/___ Ft/Inches
Don't know/Not sure 7 7 7
Refused 9 9 9

47. *OTHERWISE, INDICATE SEX OF RESPONDENT. ASK IF NECESSARY* (106)

a. Male, *GO TO SECTION I, pg 22* 1
b. Female 2

SECTION H: WOMEN'S HEALTH

These next questions are about mammograms, which are x-ray tests of the breast to look for cancer.

48. Have you ever had a mammogram? (107)

a. Yes 1
b. No *GO TO Q 50, Section H of p.21* 2
Don't know/Not sure *GO TO Q 50 in H* 7
Refused *GO TO Q 50 in H* 9

49. About how long has it been since you had your last mammogram?

Was it: *PLEASE READ* (108)

a. Within the past year *GO TO Q 51 in H* (0 TO 12 MONTHS AGO) . . . 1
b. Within the past two years (13 TO 24 MONTHS AGO) . . . 2
c. Within the past five years (25 TO 60 MONTHS AGO) . . . 3
OR
d. More than five years ago (61+ MONTHS AGO) . . . 4
Don't know/Not sure 7
Refused 9

50a. What is the most important reason that you did not have a mammogram in the last year?

SELECT ONLY ONE. RECORD ONE 1 ONE ANSWER (109)

a. Not recommended by doctor / Doctor never said it was needed . . . 1
b. Not needed / Not necessary 2
c. Never heard of mammogram 3
d. Cost 4
e. No insurance to pay for it 5
f. Other 6
Don't know/Not sure 7
Refused 9

51. Was your last mammogram done as part of a routine checkup, because of a breast problem, or because you've already had breast cancer? (110)

a. Routine checkup 1
b. Breast problem 2
c. Had breast cancer 3
Don't know/Not sure 7
Refused 9

52. Whose idea was it for you to have this last mammogram - was it your idea, your doctor's idea, or someone else's idea?
PROBE FOR THE MOST INFLUENTIAL. RECORD ONLY ONE RESPONSE. (111)

a. Respondent's idea 1
b. Doctor's idea 2
c. Someone else's idea 3
Don't know/Not sure 7
Refused 9

INTERVIEWER: GO TO Q.54, PAGE 22

53a. What is the most important reason that you never had a mammogram?
DO NOT READ LIST. RECORD ONLY ONE ANSWER (109)

a. Not recommended by doctor / doctor never said it was needed . 1
b. Not needed / not necessary 2
c. Never heard of mammogram 3
d. Cost 4
e. No insurance to pay for it 5
f. Other 6
Don't know/Not sure 7
Refused 9

The next questions are about breast physical examination, which is when the breast is felt for lumps by a doctor or medical assistant.

53. Have you ever had a breast physical exam by a doctor or a medical assistant? (112)

a. Yes 1
b. No *GO TO Q.56, pg.23* 2
Don't know/Not sure *GO TO Q.56, pg.23* 7
Refused *GO TO Q.56, pg.23* 9

54. About how long has it been since your last breast physical exam? Was it: (113)

a. Within the past year (0 to 12 months ago) 1
b. Within the past two years (13 to 24 months ago) . . . 2
c. Within the past five years (25 to 60 months ago) . . . 3
d. More than five years ago (61+ months) 4
Don't know/Not sure 7
Refused 9

55. Was your last breast physical exam done as part of a routine checkup, because of a breast problem, or because you've already had breast cancer? (114)

a. Routine checkup 1
b. Breast problem 2
c. Had breast cancer 3
Don't know/Not sure 7
Refused 9

INTERVIEWER: ARE THESE TWO QUESTIONS ONLY OF FEMALES BETWEEN 15 AND 45 YEARS OF AGE.
IF OTHERWISE, GO TO SECTION I (p.24).

56. To your knowledge, are you now pregnant? (115)

a. Yes 1
b. No *GO TO SECTION I (p.24)* 2
Don't know/Not sure *GO TO SECTION I (p.24)* 7
Refused *GO TO SECTION I (p.24)* 9

57. During what month is your baby due? (116-117)

Code Months	
01	01
02	02
03	03
04	04
05	05
06	06
07	07
08	08
09	09
10	10
11	11
12	12

Code month . . . . . __ __
Don't know/Not sure 7 7
Refused 9 9

SECTION I: AIDS

These next few questions are to determine your beliefs and opinions about the national health problem of AIDS.

58. Have you ever heard the AIDS virus called HIV? (118)

a. Yes 1
b. No 2
Don't know/Not sure 7
Refused 9

59. To your knowledge, are there drugs available which can lengthen the life of a person infected with the AIDS virus? (119)

a. Yes 1
b. No 2
Don't know/Not sure 7
Refused 9

60. Do you think a person who is infected with the AIDS virus can look and feel well and healthy? (120)

a. Yes 1
b. No 2
Don't know/Not sure 7
Refused 9

61. There has been a lot of talk about how you can and cannot get infected with the AIDS virus. Do you think you can get infected from:

	Yes	No	DK/NS	Ref	
a. Giving blood	1	2	7	9	(121)
b. Mosquitoes or other insects	1	2	7	9	(122)

62. Do you have a child or children in kindergarten through eighth grade? (123)

a. Yes 1
b. No GO TO Q 64 2
Don't know/Not sure GO TO Q 64 7
Refused GO TO Q 64 9

63. Would you allow your child to be in the same classroom with a child who is infected with the AIDS virus? (124)

a. Yes 1
b. No 2
Don't know/Not sure 7
Refused 9

64. At what grade do you think your child should begin AIDS education in school? (125-126)

[illegible] grade . . . . . — —
Never 8 8
Don't know/Not sure 7 7
Refused 9 9

65. Would you eat in a restaurant where the cook is infected with the AIDS virus? (127)

a. Yes 1
b. No 2
Don't know/Not sure 7
Refused 9

66. Would you be willing to work with a person who is infected with the AIDS virus? (128)

a. Yes 1
b. No 2
Don't know/Not sure 7
Refused 9

67. Where could you go to be tested for the AIDS virus infection? (129-130)
PROBE FOR OTHER PLACES IF ONLY ONE MENTIONED IN DATA

a. [illegible] code . . . . . — —

(131-132)

b. Where else could you go? . . . . . — —

PLEASE DO NOT READ LIST

a. Private doctor, HMO 01
b. Blood bank, plasma center, Red Cross 02
c. Health department 03
d. AIDS clinic, AIDS testing site 04
e. Hospital, emergency room 05
f. Family planning clinic 06
g. STD clinic 07
h. Community health clinic, primary care clinic 08
i. Company or industry clinic 09
j. Military induction or examination 10
k. Other 87
l. No place 88
Don't know/Not sure 77
Refused 99

68. Some people use condoms to keep from getting the AIDS virus through sexual activity. How effective do you think using a condom is in preventing getting the AIDS virus through sexual activity?

Would you say: PLEASE READ (133)

a. Very effective 1
b. Somewhat effective 2
OR
c. Not at all effective 3

DO NOT READ THESE RESPONSES
Don't know how effective 4
Don't know method 5
Refused 9

69. How many telephone numbers will reach this household, including the number I used today?

DIFFERENTIATE BETWEEN TELEPHONE NUMBERS AND TELEPHONE SETS IF NECESSARY.
EXCLUDE ALL TELEPHONE NUMBERS THAT CAN REACH HOUSEHOLD (134)

a. Total telephone numbers . . . . . ——

MODULE 1: COUNTY OF RESIDENCE

1. What county do you live in? (135-137)

a. County Code . . . . . — — —
Don't know/Not sure 7 7 7
Refused 9 9 9

MODULE 2: SMOKELESS TOBACCO USE

These next questions are about certain kinds of smokeless tobacco products.

1. Have you ever used or tried any smokeless tobacco products such as chewing tobacco or snuff? (130)

PROBE FOR CHEWING TOBACCO, SNUFF, OR BOTH

a. Yes, chewing tobacco 1
b. Yes, snuff 2
c. Yes, both 3
d. No, neither GO TO NEXT MODULE 4
Don't know/Not sure GO TO NEXT MODULE 7
Refused GO TO NEXT MODULE 9

2. Do you currently use any smokeless tobacco products such as chewing tobacco or snuff? (130)

"Yes" INCLUDES OCCASIONAL USE

a. Yes, chewing tobacco 1
b. Yes, snuff 2
c. Yes, both 3
d. No, neither 4
Don't know/Not sure 7
Refused 9

MODULE 3: CERVICAL CANCER SCREENING

PLEASE NOTE: Ask all females, otherwise go to next module.

These next questions are about certain kinds of medical tests and examinations.

1. Have you ever heard of a Pap smear test? (140)

a. Yes 1
b. No GO TO Q 4 2
Don't know/Not sure GO TO Q 4 7
Refused GO TO Q 4 9

2. Have you ever had a Pap smear? (141)

a. Yes 1
b. No GO TO Q 4 2
Don't know/Not sure GO TO Q 4 7
Refused GO TO Q 4 9

3. When did you have your last Pap smear? Was it: PLEASE READ (142)

a. Within the past year (1 TO 12 MONTHS AGO) . . . 1
b. Within the past two years (13 TO 24 MONTHS AGO) . . 2
c. Within the past five years (25 TO 60 MONTHS AGO) OR . . 3
d. More than five years ago (61+ MONTHS AGO) . . . 4
Don't know/Not sure 7
Refused 9

4. Have you had a hysterectomy? (143)
PLEASE NOTE: A hysterectomy is "the operation to remove the uterus."

a. Yes 1
b. No 2
Don't know/Not sure 7
Refused 9

MODULE 7: RADON TESTING

1. Have you heard of Radon—which is a radioactive gas that occurs in nature? (187)

a. Yes 1
b. No GO TO NEXT MODULE 2
Don't know/Not sure 7
Refused 9

2. Has your household air been tested for the presence of Radon gas? (188)

a. Yes 1
b. No 2
Don't know/Not sure 7
Refused 9

3. Do you know how to test your home for the presence of Radon? (189)

a. Yes 1
b. No 2
Don't know/Not sure 7
Refused 9

4. Do you, or does anyone in your home plan to have your household air tested for Radon within the next year? (190)

a. Yes 1
b. No 2
Don't know/Not sure 7
Refused 9

5. Please indicate your agreement or disagreement with the following statement. "Prolonged exposure to Radon gas can be harmful to your health." Do you agree or disagree? (191)

a. Agree 1
b. Disagree 2
Don't know/Not sure 7
Refused 9

6. Which, if any, of the following conditions do you think can be caused by prolonged Radon exposure?

PLEASE READ	Yes	No	DON'T KNOW	Ref	
a. Headache	1	2	7	9	(192)
b. Asthma	1	2	7	9	(193)
c. Arthritis	1	2	7	9	(194)
d. Lung cancer	1	2	7	9	(195)
e. Other cancers besides lung	1	2	7	9	(196)

7. Which of the following best describes your residence? (197)
PLEASE READ

a. Single family home, duplex, or townhouse . . . 1
b. Apt. or condo at basement level, or on 1st or 2nd floor . 2
c. Apt. or condo above 2nd floor 3
d. Trailer or mobile home 4
e. Other 5
Don't know/Not sure 7
Refused 9

1990 SOUTH DAKOTA STATE MODULE

1. Is your health professional located within (255)

PLEASE READ

5 miles from your home.....1
6-20 miles from your home.....2
21-60 miles from your home.....3
More than 60 miles from your home.....4
Don't know/Not sure.....7
Refused.....9

2. Do you have health insurance? (256)

Yes.....1
No.....2
Don't know/Not sure.....7
Refused.....9

3. Has the cost of health care ever influenced your decision to receive care? (257)

Yes.....1
No.....2
Don't know/Not sure.....7
Refused.....9

4a. Do you have children under the age of 5? (258)

Yes (GO TO QUESTION 4b).....1
No (GO TO QUESTION 5a).....2
Don't know/Not sure (GO TO QUESTION 5a).....7
Refused (GO TO QUESTION 5a).....9

4b When riding in a car, how often is he/she buckled in a car safety seat or seat belt? (259)

Would you say:

PLEASE READ

All of the time.....1
Most of the time.....2
Sometimes.....3
Rarely.....4
OR
Never.....5
Don't know/Not sure.....7
Refused.....9

5a. Do you have children between the ages of 5 and 17? (260)

Yes (GO TO QUESTION 5b).....1
No (END OF INTERVIEW).....2
Don't know/Not sure (END OF INTERVIEW).....7
Refused (END OF INTERVIEW).....9

5b. When riding in a car, how often is he/she use a seat belt? (261)

Would you say:.

PLEASE READ

All of the time.....1
Most of the time.....2
Sometimes.....3
Rarely.....4
OR
Never.....5
Don't know/Not sure.....7
Refused.....9

CLOSING STATEMENT - That is my last question. Let me emphasize that your answers cannot be identified with your name. Everyone's answers will be combined to give us information about the health practices of people in this state. Thank you very much for your time and cooperation.

Appendix B

Table B-1

Demographic Summary of Survey Population, 1990				
Demographic Characteristic	Respondent		1988 Population Est.	
Age	N	%	N	%
18-24	154	15.2	75,391	14.6
25-34	407	23.6	121,880	23.6
35-44	365	17.3	92,322	17.9
45-54	195	12.1	63,967	12.4
55-64	234	12.4	62,890	12.2
Over 65	434	19.4	100,043	19.4
Unknown	10	0.5	-	-
TOTAL	1,799	100.0	516,493	100.1
Sex				
Male	794	48.7	252,185	48.8
Female	1,005	51.3	264,308	51.2
TOTAL	1,799	100.0	516,493	100.0
Race				
White	1,732	96.5	486,414	94.4
Non-White	67	3.5	28,855	5.6
TOTAL	1,799	100.0	516,493	100.0

Source: South Dakota State Data Center, 1988 population estimates.

Table B-2

Household Income of Survey Population, 1990		
Under $10,000	296	14.2
$10-$15,000	252	13.4
$15-$20,000	234	13.0
$20-$25,000	223	13.0
$25-$35,000	261	15.6
$35-$50,000	187	11.4
Over $50,000	137	7.8
Refused	209	11.7
	1,799	100.0

Table B-3

Marital Status of Survey Population, 1990		
Married	1,141	69.8
Divorced	137	5.0
Widowed	232	7.3
Separated	19	0.7
Never Married	246	15.5
Unmarried Couple	22	1.6
Unknown/Refused	2	0.1
	1,799	100.0

Table B-4

Level of Education of Survey Population, 1990		
<9th Grade	191	9.7
Some High School	128	6.8
High School Graduate	620	35.6
Some Tech. School	36	1.8
Tech. School Graduate	68	3.9
Some College	364	22.1
College Graduate	272	13.9
Post Graduate	112	5.8
Unknown/Refused	8	0.3
	1,799	100.0

Table B-5

Employment Status of Survey Population, 1990		
Employed	894	51.8
Self Employed	262	14.8
Out-of-Work >1 Year	16	0.8
Out-of-Work <1 Year	27	1.8
Homemaker	121	7.0
Student	64	5.3
Retired	415	18.5
	1,799	100.0

Appendix C

Risk Factor Definitions

Lack of Seat Belt Use	Respondents reporting they "sometimes", "seldom", or "never" use seat belts.
Hypertension	Respondents who report they have been told their blood pressure is high more than once or are on medication.
Sedentary Lifestyle	Respondents at sedentary or irregular activity level.
Overweight	Respondents at or above 120% of ideal weight. Ideal weight is defined as the mid-value of a median frame person from the 1959 Metropolitan Height-Weight Tables.
Smoking	Current regular smoker (ever smoked 100 cigarettes and smoke now).
Acute Drinking	Respondents who report having five or more drinks on an occasion, one or more times in the past month.
Chronic Drinking	Respondents who report an average of 60 or more alcoholic drinks a month.
Drinking and Driving	Respondents who report having driven after having too much to drink, one or more times in the past month.
Cholesterol	Respondents who report their blood cholesterol level is >= 200 mg/dl. This includes both borderline high blood cholesterol (200-239 mg/dl) and high blood cholesterol (>= 240 mg/dl) levels. This is the National Heart, Lung, and Blood Institute's definition.